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Additional Counsel Identified on Signature Page to Plaintiffs' Motion

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF WASHINGTON

COMMUNITY ASSOCIATION FOR
RESTORATION OF THE
ENVIRONMENT, INC., a Washington
non-profit corporation; FRIENDS OF
TOPPENISH CREEK, a Washington non-
profit corporation; *and* CENTER FOR
FOOD SAFETY, a Washington, D.C. non-
profit corporation,

Plaintiffs,

v.

AUSTIN JACK DECOSTER, an individual,
DECOSTER ENTERPRISES, LLC, a
Delaware limited liability company,
AGRICUTURAL INVESTMENT-FUND
II, LLC, a Delaware limited liability
company, IDAHO AGRI INVESTMENTS,
LLC, an Idaho limited liability company,
IDAHO DAIRY HOLDINGS, LLC, an
Idaho limited liability company, DRY
CREEK DAIRIES, LLC, an Idaho limited
liability company, WASHIGNTON AGRI
INVESTMENTS, LLC, a Washington
limited liability company, WASHINGTON
DAIRY HOLDINGS, LLC, a Washington
limited liability company, DBD
WASHINGTON, LLC, a Washington

Case No. 1:19-CV-3110-TOR

**DECLARATION OF CHARLES M.
TEBBUTT IN SUPPORT OF
PLAINTIFFS' MOTION FOR AWARD
OF ATTORNEYS' AND EXPERT
WITNESSES' FEES AND COSTS**

DECLARATION OF CHARLES M. TEBBUTT IN SUPPORT OF PLAINTIFFS'
MOTION FOR AWARD OF FEES AND COSTS

1 limited liability company; and SMD, LLC, a
2 Washington limited liability company,
3 Defendants.

4 I, Charles M. Tebbutt, hereby declare as follows:

5 1. I am lead counsel for Plaintiffs in the above-captioned cases. I make
6 this declaration in support of Plaintiffs' Motion for Award of Attorneys' and
7 Expert Witness Fees and Costs. A copy of my firm's hours, which are kept
8 contemporaneously as work is completed, is attached hereto as Exhibit 1. This
9 declaration includes hours spent by all personnel working for my firm, including
10 for Dan Snyder (for the time when he was with my firm), Jonathan Frohnmayer, B.
11 Parker Jones, Andrea Rodgers (as outside counsel), and Marisela Taylor.

12 2. I have been practicing environmental law for over 35 years. I am
13 admitted to practice in Washington (2014), Oregon (1996), and New York (1988),
14 before the United States Supreme Court, the Second, Fourth, Fifth, Sixth, Ninth,
15 and D.C. Circuit Courts of Appeals, and many district courts, including the Eastern
16 District of Washington. I have had my own law firm since 2009. From 1994-2009,
17 I was an attorney with the Western Environmental Law Center in Eugene, OR.
18 From 1990-1994, I was an attorney with the law firm of Allen, Lippes & Shonn,
19 based in Buffalo, New York. From 1988-1990, I was staff counsel for Atlantic
20 States Legal Foundation, based in Syracuse, New York. I was a part-time lawyer

1 for Birnbaum & Rojas in 1988-1989. I graduated from Syracuse University
2 College of Law in 1987.

3 3. I work full time on issues involving federal, state, and international
4 environmental laws. I have been involved, either in litigation or oversight
5 responsibility, with well over 100 citizen enforcement cases in more than twenty-
6 five states and the District of Columbia. I have represented citizen-plaintiffs under
7 the Federal Water Pollution Control Act (Clean Water Act), the Resource
8 Conservation and Recovery Act, the Emergency Planning and Community Right-
9 to-Know Act, the Comprehensive Environmental Response, Compensation, and
10 Liability Act, the Endangered Species Act, and the National Environmental Policy
11 Act, among other statutes. While at Allen, Lippes & Shonn, I also represented
12 victims of chemical exposure in large, complex toxic tort cases throughout the
13 United States.

14 4. A sampling of representative cases in which I have been lead counsel
15 include: *Cnty. Ass'n for Restoration of the Env't v. Cow Palace, Ltd. Liab. Co.*, 80
16 F. Supp. 3d 1180 (E.D. Wash. 2015) (liability phase); *Sierra Club v. BNSF Ry.*
17 *Co.*, 276 F. Supp. 3d 1067 (W.D. Wash. 2017) (CWA attorneys' fees); *Friends of*
18 *Maha'uilepu v. Hawaii Dairy Farms, LLC*, 224 F. Supp. 3d 1094 (D. Haw. 2016);
19 *Saint John's Organic Farm v. Gem Cty. Mosquito Abatement Dist.*, 574 F.3d 1054
20 (9th Cir. 2009) (CWA attorneys' fees); *Nat'l Cotton Council v. EPA*, 553 F.3d 927

(6th Cir. 2009), *cert. denied*, 130 S. Ct. 1505 (2010) (consolidated from eleven circuits, vacating EPA rule excluding certain pesticide discharges from CWA permitting); *Northern California River Watch v. City of Healdsburg*, 457 F.3d 1023 (9th Cir. 2006), *opinion withdrawn and superseded on denial of reh'g*, 496 F.3d 993 (9th Cir. 2007) (first CWA case deciding “waters of the United States” issue after Supreme Court’s *Rapanos* decision), *cert. denied*, 128 S. Ct. 1225 (2008); *Cnty. Ass’n for the Restoration of the Env’t v. Nelson Faria Dairy*, 2011 WL 6934707 (E.D. Wash. 2011); *Chevron Corp v Maria Aguinda Salazar*, 2011 WL 7112979 (11-0691-LAK S.D.N.Y.) (D. OR. ruling in Ecuador-based case representing Environmental Law Alliance Worldwide--court found Chevron harassed my third-party client in discovery); *Cnty. Ass’n for the Restoration of the Env’t v. Henry Bosma Dairy*, 65 F. Supp. 2d 1129 (E.D. Wash. 1999) (liability phase), 2001 WL 1704240 (E.D. Wash. 2001) (penalty phase), *aff’d*, 305 F.3d 943 (9th Cir. 2002); *Headwaters v. Talent Irrigation Dist.*, 243 F.3d 526 (9th Cir. 2001); *Atlantic States Legal Found. v. Pan American Tanning Corp.*, 993 F.3d 1017 (2d Cir. 1993); *Atlantic States Legal Found. v. Eastman Kodak Co.*, 933 F.3d 124 (2d Cir. 1991). I was lead counsel in *Ctr. for Biological Diversity, Inc. v. BP Am. Prod. Co.*, 704 F.3d 413, 417 (5th Cir. 2013), the only citizen suit in the largest set of litigation in the history of the planet involving the 2010 Gulf of Mexico Deep Water Horizon oil spill disaster, serving as a court-appointed committee

1 representative in one of the litigation “bundles”. My firm also was lead counsel in
2 *Lummi Nation v. Cooke Aquaculture Pacific LLC*, Case No. 20-2-12869 (Wa.
3 Super. Ct. 2017) (jury in 2022 awarded \$595,000 in damages to Lummi Nation
4 from release of 300,000 Atlantic salmon into Puget Sound in 2017).

5 5. I have made presentations for national and regional meetings of the
6 U.S. Environmental Protection Agency (EPA), Continuing Legal Education
7 courses (including for the American Bar Association), the Harvard School of
8 Public Health, the Environmental Law Institute, the Federalist Society, and
9 numerous other programs and conferences. I presented on the role of citizen
10 environmental enforcement at the World Summit of Attorneys General and Public
11 Ministries held in Antigua, Guatemala in February 2004. I taught a workshop to
12 Indonesian legislative aids, media representatives, and non-governmental
13 organizations in 2000 on freedom of information and open government laws and
14 pollution right-to-know statutes when that fledgling democracy was working on
15 establishing its own forms of government and corporate accountability. In 2012, I
16 was invited to a small group for “The Clean Water Act at 40,” sponsored by
17 Harvard Law School. I have worked on multiple climate change cases including
18 *Alec L., et al., v. Gina McCarthy, et al.*, No. 13-5192 (D.D.C.) (amicus brief on
19 behalf of 11 leading climate scientists); *Juliana v. United States*, 947 F.3d 1159
20 (9th Cir. 2020) (amicus brief for multiple religious organizations in constitutional

1 climate change case on behalf of twenty-one youth against the executive branch of
2 U.S. government); and presented in Oslo, Norway in 2018 on climate change
3 impact litigation.

4 6. I have received a number of awards in recognition of my work,
5 including the Kerry Rydberg (now the Kerry Rydberg-Jack Tuholske) Award for
6 Excellence in Public Interest Environmental Lawyering in 2010 and the Public
7 Justice Change Maker Award in 2016 for the *Cow Palace* litigation.

8 **BACKGROUND**

9 7. The Court is familiar with some of the background of my experience
10 from the prior *Cow Palace* series of cases. My legal work, on behalf of
11 Community Association for Restoration of the Environment (“CARE”), has been
12 featured in two books, *This Moment on Earth*, Public Affairs (2007), and *Animal*
13 *Factory*, St. Martin’s Press (2010). The events described in the two books relate to
14 CAFO enforcement actions in the Lower Yakima Valley, with emphasis on the
15 *CARE v. Henry Bosma Dairy* case from the late 1990s.

16 8. I have represented CARE since 1997, Friends of Toppenish Creek
17 (“Friends”) since 2017, and Center for Food Safety (“CFS”) since 2012.

18 9. The 1997 litigation against the Lower Yakima Valley dairies was the
19 first coordinated, campaign-style enforcement against industrial dairies using the
20 citizen suit provisions of the Clean Water Act in the United States.

1 10. Settlements of many of the cases, including the *DeRuyter* (the
2 predecessor owners for some of the facilities at issue here) case settled in 2001,
3 provided approximately \$500,000 in funds to study residential well water quality
4 in low-income residents in the Lower Yakima Valley. The two studies, completed
5 in 2003, one by Heritage College and the other by the Valley Institute for Research
6 and Education, resulted in similar findings that over 20% of the wells of low-
7 income residents in the Lower Yakima Valley were contaminated with nitrate
8 above the federal safe drinking water maximum contaminant level of 10 mg/L.
9 Despite these significant findings, the agencies failed to take any action to protect
10 public health and the environment until years later. Finally, after a three-part
11 investigative series by the Yakima Herald Republic in 2008, the EPA undertook a
12 study of the Lower Yakima Valley as one of ten national environmental justice
13 projects.

14 11. EPA began studying the groundwater contamination in the Lower
15 Yakima Valley in 2010. CARE and Center for Food Safety, two of the plaintiffs
16 here, brought actions against the “Cluster Dairies” in 2013. The Court is quite
17 familiar with the Cluster Dairy cases, having addressed years of litigation issues,
18 which culminated in three Consent Decrees with the respective Cluster Dairy
19 groups. *Cnty. Ass’n for Restoration of the Env’t, Inc. v. Henry Bosma Dairy*, No.
20 13-CV-3019-TOR, ECF No. 246; *Cnty. Ass’n for Restoration of the Env’t v. Cow*

1 *Palace, Ltd. Liab. Co.*, ECF No. 396; *Cnty. Ass'n for Restoration of the Env't v.*
 2 *George & Margaret Ltd. Liab. Co.*, No. 13-CV-3017-TOR, ECF No. 169. The
 3 Court issued an award of fees and costs to the plaintiffs in the Cluster Dairy cases
 4 in January 2016. *Cnty. Ass'n for Restoration of the Env't, Inc. v. Cow Palace, Ltd.*
 5 *Liab. Co.*, No. 13-CV-3016-TOR, 2016 U.S. Dist. LEXIS 92110, at *66 (E.D.
 6 Wash. Jan. 12, 2016).

7 12. Law review articles, as well as extensive media coverage of the *Cow*
 8 *Palace* decisions and Consent Decrees, attest to the importance of the precedents
 9 of these cases. *See, e.g.*, Reed J. McCalib, *Opening the Gates of Cow Palace:*
 10 *Regulating Runoff Manure as a Hazardous Waste Under RCRA*, 116 MICH. L. REV.
 11 501 (2017); Rachel Fullmer, Note, *A Cow Palace Coup: Expanding the Reach of*
 12 *RCRA to Combat Agricultural Pollution*, 28 GEO. ENVTL. L. REV. 501 (2016); Phil
 13 Ferolito, *Granger Dairy Trying to Keep Manure out of Groundwater*, YAKIMA
 14 HERALD-REPUBLIC (Dec. 13, 2016),
 15 [https://www.yakimaherald.com/news/local/granger-dairy-trying-to-keep-manure-](https://www.yakimaherald.com/news/local/granger-dairy-trying-to-keep-manure-out-of-groundwater/article_e4e862a8-c15f-11e6-ba6a-eb14b8226349.html)
 16 [out-of-groundwater/article_e4e862a8-c15f-11e6-ba6a-eb14b8226349.html](https://www.yakimaherald.com/news/local/granger-dairy-trying-to-keep-manure-out-of-groundwater/article_e4e862a8-c15f-11e6-ba6a-eb14b8226349.html); *Dairy*
 17 *Farmers Must Supply Neighbors Clean Water*, KING5 (June 20, 2015),
 18 [https://www.king5.com/article/news/local/dairy-farmers-must-supply-neighbors-](https://www.king5.com/article/news/local/dairy-farmers-must-supply-neighbors-clean-water/281-140305188)
 19 [clean-water/281-140305188](https://www.king5.com/article/news/local/dairy-farmers-must-supply-neighbors-clean-water/281-140305188). The Cluster Dairy and other CAFO cases brought by
 20 my firm were extensively covered by renowned Professor William H. Rodgers

(recently deceased) in his final hornbook. Rodgers and Burleson, Environmental Law §§ 16:2, 16:4, pp. 310-314, 16:5, pp. 315-322, 16:6, p. 325 (“The Cow Palace CAFO facility had now earned its place in legal history.”) (2d ed.).

13. The rates requested in this matter take into account the 2016 decision, are adjusted for experience, inflation, and based on surveys of recent Eastern District rates and recent fee decisions. In my case, and that of Daniel Snyder, given our particularized experience, Plaintiffs seek national market rates based on the USAO Attorney’s Fees Matrix or the *Laffey* Matrix. Table 1 of **Appendix A** to the fee petition shows timekeeper rates and hours as follows:

a. **Column D** shows the USAO Attorney’s Fees Matrix rate for 2020-21 based on years of experience, an older version of which this Court utilized in *Red Lion Hotels Franchising, Inc. v. Century-Omaha Land, LLC*. Court No. 2:18-CV-0131-TOR, 2019 U.S. Dist. LEXIS 26152, at *10 (E.D. Wash. Feb. 19, 2019); U.S. Dept. of Justice, *USAO Attorneys’ Fees Matrix – 2015-2021*, <https://www.justice.gov/file/1461316/download> (last accessed Sept. 15, 2023).

b. **Column E** shows that rate adjusted for 2023-24; because a more recent version of that matrix is unavailable, those numbers reflect a 10.4% increase, which is the percentage increase in that matrix

1 between 2017-18 and 2020-21 for the 31+ years' experience bracket.
2 That increase is conservative, given that U.S. Department of Labor
3 statistics show an inflation rate of 18.12% from August 2020 to
4 August 2023, and courts may consider inflation in fashioning fee
5 awards. U.S. BUREAU OF LABOR STATISTICS, U.S. DEPT. OF
6 LABOR, *CPI Inflation* Calculator, [https://data.bls.gov/cgi-](https://data.bls.gov/cgi-bin/cpicalc.pl)
7 [bin/cpicalc.pl](https://data.bls.gov/cgi-bin/cpicalc.pl) (last accessed Sept. 14, 2023); *see Rueda-Menicucci v.*
8 *INS*, 132 F.3d 493, 496 (9th Cir. 1997) (increasing hourly rate in fee
9 award to plaintiffs from the maximum statutory rate under the
10 Equal Access to Justice Act).

11 c. **Column F** then shows that rate further adjusted by a Locality Based
12 Comparability Payments decrease of 12.85%, which this Court
13 utilized to arrive at the rates in *Red Lion*. Court No. 2:18-CV-0131-
14 TOR, 2019 U.S. Dist. LEXIS 26152, at *10; Schedule 9, Exec. Order
15 No. 13819, 5 CFR § 531.603, [https://www.opm.gov/policy-data-](https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/pay-executive-order-2018-adjustments-of-certain-rates-of-pay.pdf)
16 [oversight/pay-leave/salaries-wages/pay-executive-order-2018-](https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/pay-executive-order-2018-adjustments-of-certain-rates-of-pay.pdf)
17 [adjustments-of-certain-rates-of-pay.pdf](https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/pay-executive-order-2018-adjustments-of-certain-rates-of-pay.pdf). The 28.22% "Washington-
18 Baltimore-Arlington" rate minus the 15.37% "Rest of U.S." rate
19 (which includes Spokane) is 12.85%.

20 d. **Column G** shows our requested rates, off of which the final dollar

1 amounts are based; Mr. Snyder and I are both at the top of the
2 locality-adjusted rates, while the other attorneys' rates are below.

3 e. In addition, **Column H** shows unadjusted rates for both Mr. Snyder
4 and myself, which we invite the Court to consider in the alternative.

5 f. Finally, **Column I** shows the *Laffey* rates for comparison, which are
6 *significantly* higher than any of the foregoing. LAFHEY MATRIX,
7 <http://www.laffeymatrix.com/see.html> (last accessed Sept. 15, 2023).

8 We further invite the Court to consider these rates for Mr. Snyder and
9 myself. That is particularly appropriate in my case, given that I have
10 15 years more experience than the minimum for the highest bracket
11 (20 years) in the *Laffey* Matrix.

12 14. CARE, Friends, and CFS have also been co-plaintiffs in additional
13 enforcement actions against Lower Yakima Valley dairies since the Cluster Dairy
14 cases. Those cases resolved through Consent Decrees signed by this Court
15 involving the following defendants: Snipes Mountain Dairy, Case No. 1:17-cv-
16 03067-TOR (2019), ECF No. 26; Spring Canyon Ranch, Case No. 1:19-cv-03264-
17 TOR (2019), ECF No. 4; Sunnyside Dairy, Case No. 1:20-CV-3128-TOR (2020),
18 ECF No. 6; and View Point Dairy, Case No. 1:22-cv-03143-TOR, (2022), ECF
19 No. 9. Each of those cases resolved without adversarial litigation.

HISTORY OF CASE

17. From the very beginning, this case was contentious. The initial four LLC defendants moved to dismiss the case. ECF No. 14. At that time, they were represented by Jeremy Fielding and Kent Krabill from the Dallas, Texas firm of Lynn Pinker Cox & Hurst LLP. Marten Law, from Seattle, was then local counsel.

18. Defendants' motion to dismiss was largely denied, with the exception of dismissal of two of the LLCs, both of which were later added back into the case after extensive discovery was conducted. *See* ECF No. 40 (Order on Mot. to

Dismiss) and ECF No. 134 (Order adding back two original parties, adding numerous others, and denying MTDs on multiple grounds). In fact, Jack DeCoster's name never even appeared in any of the discovery documents until we obtained documents, including a personal guarantee of payment from Mr. DeCoster, in a third-party subpoena and deposition of the prior owner.

DEFENDANTS' CHANGING ROTATION OF COUNSEL

19. This case is unprecedented, and was made more complicated and time-consuming, by Defendants' revolving door of legal representation. Defendants first used Lynn Pinker Cox and Hurst as lead counsel and Marten Law as local counsel. During the first court-assisted efforts at settlement, ECF No. 47, and the second and third, different Marten Law attorneys from Jeff Kray, Jennifer Hammitt, Steven Odell, and later Lawrence Fite, became lead after Lynn Pinker's withdrawal. *See* ECF No. 38. At that time, John Glessner appeared to be in charge for Defendants and represented as such. During that period, Mr. DeCoster's name appeared on no documents provided by Defendants, including their Rule 26(a) disclosures. It took extensive and creative discovery to find that Mr. DeCoster was the ultimate owner.

20. The Roster of attorneys and dates of representation are summarized as follows:

a. Marten Law LLP (Seattle-based): July 24, 2019, to November 9,

2022, ECF Nos. 9 and 146.

b. Lynn Pinker Cox & Hurst (Dallas-based): August 20, 2019, to October 3, 2019, ECF Nos. 20, 21, 22, and 38.

c. Sidley Austin LLP, (Washington, D.C.): January 27, 2022, to March 13, 2023, ECF Nos. 125, 126, 161, representing Defendants Austin Jack DeCoster, DeCoster Enterprises LLC, Agricultural Investment-Fund II, LLC, Idaho Agri Investments, LLC, Idaho Dairy Holdings, LLC, and Dry Creek Dairies, LLC.

d. Halverson Northwest Law Group P.C.: December 1, 2022, to present, ECF No. 147.

e. Gary Baise, Olsson Frank Weeda Terman Matz, P.C., and then individually, (Washington, D.C. based) December 8, 2022, to present, ECF No. 149.

f. Stokes Lawrence, Brendan Monahan: June/July 2022 until early 2023, came in exclusively for settlement purposes.

21. Our team had to spend a significant amount of time getting each of these attorneys up to speed on matters already discussed and decided, given obvious communication problems among Defendants and their attorneys.

22. CARE filed a First Amended Complaint (ECF No. 102) in November 2021 and took further depositions to gather facts for adding responsible parties.

1 Prior to amending the complaint, and soon after Mr. Glessner's deposition in
2 December 2020, he disappeared from the case. During the deposition, Mr. Glessner
3 admitted that neither his phone nor computer had been searched for responsive
4 records, in spite of such records being responsive to discovery requests. Exhibit 5,
5 J. Glessner Dep. 12:24-25, 13:1-14. Numerous other instances of failure to search
6 for and produce relevant records became evident. CARE exchanged
7 communications on obvious spoliation of evidence and sought to remedy some of
8 the failures through obtaining phone and computer records. *See* Exhibits 6 and 7
9 (copies of my October 23, 2020, and December 23, 2020, correspondences to
10 Defendants on this issue). Ultimately, CARE was forced to move to compel and
11 for sanctions, ECF No. 162, which were largely granted. ECF No. 177.

12 23. Mr. Glessner, after disappearing from his role as manager and lead
13 contact, then hired an attorney in Iowa to fight turning over the information on
14 those devices as well as to contest employment issues with Mr. DeCoster. Mr.
15 Glessner and Mr. DeCoster have a long and complicated history of suits and
16 countersuits against each other over employment matters. The Belin McCormick
17 firm from Iowa was Mr. Glessner's personal attorney and refused to provide his
18 devices for search. Exhibit 8. Even after Mr. Glessner returned to the case in the
19 spring of 2022, it remains unclear whether his devices were ever properly
20 searched.

SCHEDULING & DISCOVERY

24. After the first decision on the motions to dismiss, the parties entered into discussions about a case scheduling order as required by the local rules. During the course of this case, seven amended scheduling orders were entered. *See, e.g.*, ECF Nos. 72 (first) and 150 (seventh).

25. After weeks of negotiation on a typically straightforward issue, the parties finally agreed to a protective order. ECF No. 82. The protective order, and Defendants' over-designation of documents as confidential, would later become a time-intensive issue of contention and case management due to requirements to file documents under seal, the opportunity to designate confidentiality (never used by Defendants) during depositions, and other encumbrances that required extra time. At the request of Plaintiffs, the Court unsealed some documents. ECF No. 134 at 7.

26. During the early conferences about discovery exchange and scheduling, Plaintiffs made clearly known their intention to do extensive Rule 34 inspections to ascertain the full extent of the soil and groundwater pollution problems caused by Defendants. Defendants made their opposition known early and often. With COVID-19 becoming prevalent in early 2020, Defendants tried to use the pandemic as a means to resist inspections. Ultimately, CARE went to Governor Inslee's office to secure a ruling that its inspection was "essential," and

1 thus allowed to occur during the pandemic. *See* Exhibit 9 (email correspondence
2 with Alejandro Sanchez from Governor Inslee's office).

3 27. With the parties unable to reach agreement on numerous discovery
4 and scheduling issues, Plaintiffs accepted the Court's invitation to hold informal
5 discovery conferences. The conference on Rule 34 issues was held with the Court
6 on May 7, 2020. ECF No. 61.

7 28. The initial Rule 34 inspection, limited due to COVID-19 concerns,
8 took place in May 2020. Plaintiffs undertook two days of sampling, which showed
9 massive contamination of soils and groundwater from overapplication of manure,
10 leaking lagoons, and other poor management. Exhibit 10 (excerpts of Expert
11 Report of David J. Erickson, March 10, 2023, at 23-26).

12 29. Soon after the results of the Rule 34 sampling came back, the parties
13 again discussed settlement. After some back and forth, another stay was entered to
14 allow continued settlement discussions. ECF No. 96. The agreement to stay was
15 reached upon Defendants' representation that they would be closing the dairy
16 operations and remediating the property. *See* ECF No. 95 at 2:11-3:10. Defendants
17 later reneged on the promise to cease dairy operations and continue to operate to
18 this day, albeit presently with fewer milking cows.

19 30. It wasn't until sometime in 2022, over a year after his earlier
20 disappearance, that Mr. Glessner appeared again as dairy manager and primary

1 contact for settlement purposes. In late June or July 2022, Brendan Monahan from
2 Stokes Lawrence was brought in to assist solely with settlement negotiations. A
3 few months later, on October 6, 2022, Marten Law moved to withdraw as counsel.
4 ECF No. 143.

5 31. John Glessner reached out to me directly sometime in Spring 2022
6 over the telephone, and wanted to directly negotiate with me, without his counsel
7 present, terms of potential settlement and case status. Before responding to him, I
8 contacted all attorneys then of record, which then included Marten Law, Sidley &
9 Austin, and Belin McCormick, to make sure I had their express permission to talk
10 directly with Mr. Glessner as the agent for all Defendants. They each gave me their
11 express written consent to talk to Mr. Glessner without them present. Such a
12 situation, especially after years of adversarial litigation, was most unusual. Even
13 during the months that Brendan Monahan was involved with settlement
14 discussions, I sometimes continued to discuss matters directly with Mr. Glessner,
15 of course with Mr. Monahan's express permission, again a very unusual situation.

16 32. At times, I would be negotiating directly with Mr. Glessner. At other
17 times, Mr. Glessner and his consultant, Scott Stephen, would negotiate with Mr.
18 Erickson, me, and my associates. Just shortly before the terms of the Consent
19 Decree were agreed upon in principle, just Mr. Glessner and I negotiated face-to-
20 face in my office in Seattle. In all of my years of practice, I have never negotiated a

1 resolution of this magnitude directly with a non-attorney, who was not even a
2 named Defendant. I was always careful to obtain permission to do so from
3 Defendants' counsel of record at the time. As previously mentioned, Defendants'
4 counsel changed many times, including Defendant parties ostensibly represented
5 by the revolving door of attorneys. Mr. Carroll had been counsel, along with Mr.
6 Baise, since late 2022 and Mr. Carroll approved the final Consent Decree language
7 and filing with the Court.

8 33. Because of the scope and intensity of this litigation, and with trial
9 scheduled multiple times, including July 2023, my firm had to turn away numerous
10 other case opportunities in multiple states over the period of 2019-2023.

11 CO-COUNSEL

12 34. While retaining supervision, I delegated work to co-counsel in this
13 case based on their skills and experience in order to maximize the Plaintiffs' work
14 product while also eliminating any unnecessary duplication. This case was
15 different from the *Cow Palace* series of cases because of the significant precedents
16 already established in this district. Nevertheless, it was at times very contentious
17 and fraught with fits and starts of trying to figure out which lawyer to speak to,
18 which lawyers represented which parties (they sometimes didn't even know), and
19 how to reach a negotiated resolution intermingled with intense periods of
20 adversarial litigation, as evidenced by over 180 ECF docket entries thus far.

1 35. All counsel for Plaintiffs have worked contingently upon ultimate
2 success, as provided for by Congress in the fee shifting provision of the Resource
3 Conservation and Recovery Act. 42 U.S.C. § 6972(e). Without the fee shifting
4 provisions, Plaintiffs would otherwise be unable to obtain legal services. I am
5 aware of no other firms in Washington who would agree to take this or similar
6 CAFO enforcement cases without the expertise of my firm and no other such cases
7 have been brought in Washington that have not included my firm as lead counsel.
8 Moreover, there is only a small community of environmental litigators *nationwide*
9 with expertise in CAFOs and the resources necessary to litigate cases of this
10 magnitude and difficulty.

11 36. After graduating from law school in 2010, Dan Snyder immersed
12 himself in complex, high-impact environmental litigation as an associate with my
13 firm. Mr. Snyder worked for me as part of the University of Oregon Environmental
14 Law Clinic, then as an extern, then as my associate. Because of my firm's national
15 litigation practice, his environmental litigation experience far exceeds most
16 lawyers with two or three times the number of years in practice. Dan worked on
17 the BP Gulf spill case, in which our firm was appointed to a work group in that
18 Multi-District Litigation, as well as cases in California, Washington, Idaho,
19 Florida, Georgia, Montana, Colorado, New Mexico, and North Carolina. As the
20 time entries indicate, he and I have regularly coordinated on case strategy and

1 implementation. There are numerous hours that we have spent strategizing, some
2 of which are, and many not, reflected in the time entries. Mr. Snyder also
3 coordinated, pursuant to my delegation and supervision, much of the day-to-day
4 case management, including, inter alia, motion practice, discovery, expert reports,
5 and trial preparation.

6 37. The firm of Terrell Marshall came into the case at its inception, after
7 having worked with us on other Eastern District CAFO cases. Toby Marshall,
8 Amanda Steiner and Blythe Chandler provided the most direct assistance, with
9 others from their firm assisting as well. They did stellar work on any tasks I asked
10 of them as well as advancing critical costs. One particular task was assisting with
11 piercing the multiple shell LLCs in the way of getting to Mr. DeCoster. I have
12 reviewed Terrell Marshall's submission, submitted with the Declaration of Toby
13 Marshall, and find the work for which they seek compensation to be essential and
14 reasonable in the prosecution of this case.

15 38. Center for Food Safety was a co-plaintiff. Amy van Saun was the
16 primary client contact and also served as co-counsel, who, along with their staff,
17 provided critical litigation support during the most intensive litigation aspects of
18 this case. Amy has submitted a separate declaration describing their team's time. I
19 have reviewed CFS's submission, which had redacted time, and find it necessary
20 and reasonable in the prosecution of this case.

1 39. Jonathan Frohnmayer, a 2013 University of Oregon School of Law
2 grad (Order of the Coif; Editor in Chief, Oregon Law Review), and Stanford
3 undergrad, started with my firm in November 2022. Mr. Frohnmayer briefly
4 researched Clean Water Act issues for my firm during law school in 2011. He
5 replaced B. Parker Jones, a 2019 UO Law grad, who had worked on this case as an
6 associate with my firm since 2019. Mr. Frohnmayer previously worked as a
7 corporate associate at DLA Piper LLP (US) from October 2013 to January 2017,
8 where his billing rate was \$595 per hour. After he left DLA, Mr. Frohnmayer was
9 an attorney and organizer with an animal welfare and environmental advocacy
10 group, where he worked on both civil and criminal litigation as well as community
11 organizing.

12 40. Andrea Rodgers has had her own practice, in addition to other
13 professional endeavors, for well over ten years. Ms. Rodgers's background is set
14 forth in her separate declaration. Ms. Rodgers acted as local counsel, incurring
15 relatively few hours in this case, again testament to the efficiency of Plaintiffs'
16 attorneys. Her hours are included in Exhibit 1 to this declaration. Her advice has
17 been invaluable in navigating this complex case, especially with its many ethical
18 peculiarities, convoluted corporate structures, and ever-shifting counsel.

19 41. Marisela Taylor has over 20 years of paralegal experience, both with
20 the Western Environmental Law Center and then with my firm since 2009. Her

1 assistance has helped keep fees down and added to the efficiency of prosecuting
2 this matter.

3 42. Detailed time entry breakdowns by Mr. Snyder (while he was with my
4 office), Mr. Frohnmayr, Mr. Jones, Ms. Rodgers, Ms. Taylor, and myself, are
5 attached hereto as Exhibit 1. Detailed time entry breakdowns by Mr. Snyder (since
6 he has worked at Public Justice), Terrell Marshall, and CFS are attached to their
7 respective declarations. As previously stated, I used my years of experience to
8 efficiently coordinate the extensive skills available from our litigation team.

9 **IMPLICATIONS OF THE CONSENT INNOVATIVE INDUSTRY-
10 CHANGING DECREE TERMS**

11 43. Through this litigation, Plaintiffs have obtained industry-changing
12 settlement terms that include not only similar mandatory injunctive relief achieved
13 in other Lower Yakima Valley CAFO cases, such as lagoon lining, field
14 application limits, compost changes, and Clean Drinking Water Project
15 contributions, see, e.g., ECF No 180 ¶¶ 16, 30, 47, 51, 53, but additional
16 mandatory relief above and beyond those cases by setting up a program to further
17 investigate the site for “hotspots” of contamination that will likely result in a Pilot
18 Program to more quickly remediate the hotspots to prevent ongoing and future
19 contamination of the underlying aquifer that supplies drinking water to hundreds of
20 homes. Id. ¶¶ 22-24. Defendants agreed, in one particularly extraordinary term, to

1 pay into escrow the sum of \$300,000 for Plaintiffs' experts, Water &
2 Environmental Technologies (WET), to perform the remedial investigation and
3 Pilot Programs. Id. ¶ 56. Consultation about expanding the Pilot Program to other
4 areas of the facility will also occur, thus further extending the impact of the
5 settlement. See id. ¶ 24. The remediation aspect is already underway; the Water
6 Quality Program of the State of Washington Department of Ecology sent a letter to
7 WET on August 14, 2023, informing WET that Ecology has approved the initial
8 remediation investigation at the Dairies. Exhibit 11.

9 44. As with *Cow Palace*, a number of media outlets have covered the
10 outcome, further underscoring the importance of this settlement. *See, e.g.*, Phil
11 Ferolito, Two Lower Valley Dairies Agree to Unique Environmental Cleanup Plan,
12 Yakima Herald-Republic (June 11, 2023),
13 [https://www.yakimaherald.com/news/local/two-lower-valley-dairies-agree-to-](https://www.yakimaherald.com/news/local/two-lower-valley-dairies-agree-to-unique-environmental-cleanup-plan/article_0ddacce6-0718-11ee-8be9-8791bbfe5adb.html)
14 [unique-environmental-cleanup-plan/article_0ddacce6-0718-11ee-8be9-](https://www.yakimaherald.com/news/local/two-lower-valley-dairies-agree-to-unique-environmental-cleanup-plan/article_0ddacce6-0718-11ee-8be9-8791bbfe5adb.html)
15 [8791bbfe5adb.html](https://www.yakimaherald.com/news/local/two-lower-valley-dairies-agree-to-unique-environmental-cleanup-plan/article_0ddacce6-0718-11ee-8be9-8791bbfe5adb.html).

16 45. Should Defendants challenge the groundbreaking impact of the
17 Consent Decree, Plaintiffs will be able to provide documentation of how much
18 more detailed and far-reaching the final settlement is versus what Defendants could
19 have settled for in 2019 or 2020. As the case progressed, and site data continued to
20

1 accumulate, it became obvious just how pervasive the contamination really was at
2 the sites.

3 **EXPERT SERVICES**

4 46. Plaintiffs employed the expert services of WET, based in Butte,
5 Montana, Dr. Michael Russelle, PhD, and Dr. Kieve Nachman, PhD, from Johns
6 Hopkins's Center for a Livable Future. This Court is familiar with the excellent
7 work of each of these experts from the Cluster Dairy cases, except for Dr.
8 Nachman, who took the place of the retired Dr. Robert Lawrence, MD. Dr.
9 Nachman, not coincidentally, is now the Robert S. Lawrence Professor of
10 Environmental Health and Engineering (primary) and Health Policy and
11 Management (joint) at the esteemed Johns Hopkins Bloomberg School of Public
12 Health. Each of their respective CVs are attached hereto as Exhibits 12, 13, and 14.

13 47. Mr. Erickson and his firm provided the critical field sampling services
14 and opinions used to support the findings of contamination throughout the
15 Defendants' facilities. Dr. Russelle provided critical soil science and agronomy
16 expertise, often collaborating on solutions eventually incorporated in the Consent
17 Decree with Defendants' agronomist, Scott Stephen, without the presence of
18 counsel. Such collaborations of experts, which often included WET, without
19 presence of counsel during settlement of technical issues were common, further
20

1 exemplifying how Plaintiffs were willing to innovate as a means to streamline
2 attorneys' fees and costs.

3 48. Mr. Snyder, Mr. Jones, and I worked very closely with Dr. Russelle
4 and Mr. Erickson to develop the Rule 34 inspection, review the voluminous
5 documents provided by the Defendants, review the scientific literature concerning
6 manure contamination, and assist, including Mr. Frohnmayer, with the specific
7 expert reports for these cases. We spent extensive hours reviewing documents,
8 drafting expert reports, including rebuttal opinions, which totaled more than 200
9 pages. Mr. Erickson and his team at WET were also essential in planning the
10 remedial investigation and pilot program, for which no precedent exists with
11 CAFOs. WET and Dr. Russelle were invaluable throughout the negotiation process
12 and in formulating the extraordinary terms, and supporting exhibits, of the Consent
13 Decree. The time spent by Dr. Russelle, Mr. Erickson, Mr. Erickson's support
14 team, and Dr. Nachman were essential to the prosecution of this case, and to the
15 development of the Consent Decree. Fees are not being sought by Plaintiffs'
16 experts for implementation of the Consent Decree as separate payment terms are
17 provided for in the settlement. *See* ECF 181 ¶ 56.

18 49. In this case, the Court has not had the pleasure of reading each of the
19 expert reports, as the case resolved prior to submission of such reports.

20 Undoubtedly part of the reason the matter settled was because of the strength of the

1 expert reports, each of which were provided to Defendants well in advance of
2 reaching resolution. Plaintiffs will not burden the Court with these extensive
3 reports unless Defendants challenge the fees and costs incurred by Plaintiffs in
4 obtaining these critical expert services and reserve the right to do so on reply.
5 Plaintiffs seek a total award of expert fees and costs in the amount of \$247,689, as
6 set forth in detailed invoices in Exhibits 2, 3, and 4, for each respective expert.

7 **SUMMARY OF ALL FEES AND COSTS REQUESTED**

8 50. **Appendix A** to the fee petition is the summary chart of all fees and
9 costs sought for attorney and expert fees and costs in the total amount of
10 **\$1,731,488**, which comprises \$1,427,565 for attorneys' fees and costs, \$247,689
11 for expert fees and costs, and \$56,234 in other litigation costs. Should the Court
12 award higher out of forum hourly rates for my time and that of Mr. Snyder, the
13 award should be adjusted accordingly. The \$350,000 already paid to Plaintiffs will
14 be deducted from the total award. ECF No. 181 ¶ 54. The other litigation costs
15 include, inter alia, expert fees, laboratory fees, transcript fees, airfare, car rental,
16 lodging, meals, long distance telephone charges, research charges, copying
17 charges, and other expenses directly related to the lawsuits. As counsel also fronted
18 significant costs of the litigation, counsel had a natural incentive to keep costs to
19 the minimum necessary. As one example, deposition transcripts were only ordered
20 if necessary. I have reviewed the cost submissions of all of the various firms

1 throughout this matter and believe them all to be essential and reasonable.
2 Plaintiffs have provided the listing of each type of cost to Defendants and this
3 Court. *See* Exhibit 15 hereto for itemized costs to my law office and Exhibit 3 to
4 the Terrell Marshall Declaration. Plaintiffs will provide further details on reply if
5 Defendants challenge any of the costs.

6 **FEE PETITION SCHEDULE**

7 51. On August 22, 2023, I spoke with Jay Carroll, counsel for Defendants,
8 and we agreed that, confirmed by email, pursuant to Paragraph 54 of the Consent
9 Decree, Plaintiffs' Motion for Award of Attorneys' Fees and Expert Witnesses'
10 Fees and Costs would be filed with the Court on or before September 15;
11 Defendants' Response will be due within thirty days of Plaintiffs' filing, and
12 Plaintiffs' Reply will be due within fourteen days of Defendants' Response. An
13 Unopposed Motion for Overlength Brief was filed herewith.

14 I swear under penalty of perjury that the foregoing is true and correct to the
15 best of my knowledge.

16 DATED: September 15, 2023

17
18 /s/ Charles M. Tebbutt
19 Charles M. Tebbutt
20 Law Offices of Charles M. Tebbutt

CERTIFICATE OF SERVICE

I hereby certify that on September 15, 2023, I electronically filed the foregoing document, together with all exhibits thereto, on the Court's CM/ECF filing system, which will automatically serve the following counsel of record:

| | |
|--------------------|----------------------------------|
| Gary H. Baise | gbaise@ofwlaw.com |
| Jay Carroll | jcarroll@hnw.law |
| Amy van Saun | avansaun@centerforfoodsafety.org |
| Toby Marshall | tmarshall@terrellmarshall.com |
| Blythe H. Chandler | bchandler@terrellmarshall.com |
| Andrea K. Rodgers | andrearodgers42@gmail.com |
| Daniel C. Snyder | dsnyder@publicjustice.net |

/s/ Jonathan D. Frohnmayer
Jonathan D. Frohnmayer
Law Offices of Charles M. Tebbutt

Exhibit 1 – Law Offices of Charles M. Tebbutt & Andrea K. Rodgers – Time Entries

| Date | Atty | LOCMT fees | Time |
|----------|------|---|------|
| 11/14/18 | CT | review RCRA/CWA NOI | 0.3 |
| 1/10/19 | CT | review NOI, discuss w/clients | 0.6 |
| 1/11/19 | CT | calls & corr re:adding parties | 0.4 |
| 1/15/19 | CT | work on case facts for possible NOI | 0.5 |
| 1/17/19 | CT | ph w/potential co-counsel | 0.2 |
| 1/28/19 | CT | ph w/clients re:ntc ltr | 0.3 |
| 2/1/19 | CT | review app records(.7); review NOI (.7); ph w/clients re:NOI (.6) | 2.0 |
| 2/4/19 | CT | work on NOI issues | 0.3 |
| 2/5/19 | CT | take pics of facilities | 0.5 |
| 2/6/19 | CT | mtg w/clients to discuss NOI, lit strategy | 0.5 |
| 2/7/19 | CT | emails re:ntc issues | 0.2 |
| 2/8/19 | CT | review photos, work on NOI | 0.5 |
| 2/11/19 | CT | finalize, send NOI | 0.4 |
| 3/25/19 | CT | review NOIs for case strategy | 0.3 |
| 4/19/19 | CT | review file, corr w/counsel, clients re:complaint prep | 0.4 |
| 5/2/19 | CT | work on memo to clients re:complaints, case issues | 0.6 |
| 5/8/19 | CT | ph w/HR re:complaint issues | 0.3 |
| 5/13/19 | CT | ph w/CFS re:approvals, filing | 0.3 |
| 5/15/19 | CT | ph w/JM re:complaint | 0.1 |
| 5/16/19 | CT | work on complaint (2.8); send draft to cocounsel (.2) | 3.0 |
| 5/22/19 | CT | work on complaint & client comms re:same | 1.0 |
| 5/23/19 | CT | work on complaint; emails to JT | 1.2 |
| 5/28/19 | CT | call w/JM re:case issues | 0.3 |
| 5/30/19 | CT | emails, calls re:representation | 0.3 |
| 5/31/19 | CT | ph w/JF re:case, notes to file | 0.8 |
| 6/3/19 | CT | call w/CFS re:case issues | 0.2 |
| 6/5/19 | CT | work on waiver of summons, edit transmission to JF | 0.3 |
| 6/6/19 | CT | ph w/Jm re:case expectations | 0.2 |
| 6/13/19 | CT | mtg w/HR re:case issues | 0.3 |
| 6/14/19 | CT | drive by facilities, disc w/DE; call w/standee | 0.8 |
| 6/21/19 | CT | review due diligence issues for discovery; ph w/CFS re:case costs | 0.8 |
| 6/24/19 | CT | work on r34 & standing issues | 0.4 |
| 6/25/19 | CT | edit, send r34 ltr, doc request to JF | 0.7 |
| 7/5/19 | CT | ph w/JF re:settlement | 0.4 |
| 7/10/19 | CT | edit settlement ltr, send to client w/memo | 1.2 |
| 7/11/19 | CT | review comment from clients, edit settlement ltr, send to JF | 1.1 |
| 7/17/19 | CT | ph w/HR re:case status | 0.2 |
| 7/22/19 | CT | calls to client members re:standing issues | 0.2 |
| 7/23/19 | CT | ph w/JK re:possible settlement mtg | 0.3 |
| 8/1/19 | CT | work w/CFS on financial issues for case | 1.0 |
| 8/6/19 | CT | review MTD | 1.5 |

| | | | |
|----------|----|--|-----|
| 8/15/19 | CT | resp to JK, call re:settlement mtg | 0.3 |
| 8/16/19 | CT | call w/JK re:settlement mtg | 0.2 |
| 8/19/19 | CT | work on MTD edits (1.5); work on decls of Reddout & Mendoza, corr re:same (1.2); research re:RCRA/CWA and grdwater (1.0) | 3.7 |
| 8/20/19 | CT | work on MTD resp | 0.3 |
| 8/21/19 | CT | edit entire:brief | 1.4 |
| 8/22/19 | CT | review CT decl, edits to brief | 0.5 |
| 8/26/19 | CT | final edits to brief & filing | 0.3 |
| 8/27/19 | CT | email to JK re:settlement (.3); ph w/CFS re:case update (.2) | 0.5 |
| 8/29/19 | CT | emails re:case status | 0.2 |
| 9/3/19 | CT | email to JK re:settlement | 0.2 |
| 9/6/19 | CT | review resp to settlement outline, email to expert, cocounsel | 0.8 |
| 9/10/19 | CT | review mtn to strike & reply (.7); memo to clients re:settlement resp (.2) | 0.9 |
| 9/16/19 | CT | review defs ltr resp, lagoon assessments, make notes for reply | 1.3 |
| 9/18/19 | CT | work on settlement response issues, ph w/DE re:same | 0.5 |
| 9/23/19 | CT | work on reply to 9/6 ltr, respond to JK email | 1.6 |
| 9/24/19 | CT | edit mtn to strike reply (.7); ph w/clients re:case update (.3) | 1.0 |
| 9/25/19 | CT | finalize, send settlement reply | 1.0 |
| 10/9/19 | CT | email to JK re:oral arg | 0.3 |
| 10/14/19 | CT | prep for oral arg - review briefs | 1.7 |
| 10/17/19 | CT | prep for oral arg - review cases (1.8); review sett resp (.4) | 2.2 |
| 10/18/19 | CT | prep for oral arg - review case law (3.0); memo to clients, expert re:sett resp (.3) | 3.3 |
| 10/20/19 | CT | prep for oral arg - review cases, prepare:outline | 2.5 |
| 10/21/19 | CT | deal with oral arg cancellation, emails re:same | 0.8 |
| 10/22/19 | CT | travel back to Eugene | 3.2 |
| 10/23/19 | CT | ph w/DE re:proposals | 0.3 |
| 10/28/19 | CT | emails w/counsel, clients re:Friday mtg | 0.4 |
| 10/29/19 | CT | review sett corr in prep for 11/1 mtg | 0.5 |
| 10/31/19 | CT | travel to Seattle for mtg (2.5); prep for mtg (1.3); work on jt status rept (1.0) | 4.8 |
| 11/1/19 | CT | prep for & mtg w/JK, JG | 3.8 |
| 11/3/19 | CT | travel back to Eugene | 2.5 |
| 11/4/19 | CT | review field app & nutrient budget data, notes to file(1.8); ph w/DE re:gwm plan & related (.3) | 2.1 |
| 11/7/19 | CT | review SMD drone info (.5); email to JK re:gw issues | 0.7 |
| 11/8/19 | CT | review answer | 0.3 |
| 11/12/19 | CT | edit status rept | 0.6 |
| 11/14/19 | CT | work on gwm plan, call w/DE re:same; emails re:scheduling | 0.8 |
| 11/15/19 | CT | edit & send gwm & compost plan, pen forms & related to counsel; memo to clients re:same | 1.0 |
| 11/18/19 | CT | prep for and call w/counsel re:ongoing sett issues, notes to file | 1.2 |

| | | | |
|----------|----|---|------|
| 11/19/19 | CT | ph w/DE re:yesterday's call & next steps for 12/4 site visit; emails re:drones, etc. | 0.4 |
| 11/20/19 | CT | emails re:drone bid, gw mon info, various sett issues and ph w/DE re:all | 1.2 |
| 11/21/19 | CT | review, send drone info to counsel | 0.2 |
| 11/22/19 | CT | ph w/client re:recent sett discussions | 0.3 |
| 11/26/19 | CT | prep for & scheduling call w/parties, call w/JK after (.8); work on CD oversight cost projections (.3) | 1.1 |
| 12/2/19 | CT | review docs, prep for site visit | 0.8 |
| 12/3/19 | CT | travel to Sunnyside, emails re:site visit | 4.5 |
| 12/4/19 | CT | site visit, settlement mtg and travel back (10.0); follow up calls (.5) | 10.5 |
| 12/5/19 | CT | prep for & call w/court, parties re:preliminary sett process | 0.6 |
| 12/10/19 | CT | revisit CDWP projected costs for sett | 0.2 |
| 12/17/19 | CT | review sett responsibilities, follow up to counsel | 0.6 |
| 12/18/19 | CT | work on r34, notes to file | 0.4 |
| 12/19/19 | CT | work on r34 ntc, send w/memo to experts | 1.0 |
| 1/3/20 | CT | edit, send ltr re:settlement obligations | 0.5 |
| 1/6/20 | CT | review r26 & r34 needs | 0.2 |
| 1/9/20 | CT | finalize, send r34 | 0.7 |
| 1/14/20 | CT | emails re:settlement status, missing docs, court requirements | 0.6 |
| 1/15/20 | CT | edit ltr to Suko; resp to JH | 0.3 |
| 1/17/20 | CT | review field app data | 0.2 |
| 1/22/20 | CT | status call w/court & counsel; work on outstanding settlement issues, ltr to & call w/JK re:same; review records, call w/DE | 2.2 |
| 1/23/20 | CT | work on r26 disclosures | 0.7 |
| 1/24/20 | CT | work on r26, ph w/DE re:next steps | 0.7 |
| 1/27/20 | CT | work on r26, discovery generally & settlement | 0.6 |
| 1/28/20 | CT | edit, send r37 M&C ltr re:inadequate r26 disclosures | 0.7 |
| 1/29/20 | CT | corr w/JK re:r26(.2); review MR analysis of field apps (.2) | 0.4 |
| 1/30/20 | CT | review topos docs from DBD, fwd to DE (.4); work on strategy (.4) | 0.8 |
| 2/5/20 | CT | review defs 26a resp, draft M&C ltr; work on 408 resp (.2) | 1.0 |
| 2/7/20 | CT | edit r37 ltr re:26a deficiencies & send | 0.7 |
| 2/10/20 | CT | review settlement counterproposal, compare:w/gwm plans, memo to clients/cocounsel re:same | 0.9 |
| 2/17/20 | CT | response email to JK re:r26 | 0.7 |
| 2/18/20 | CT | email to defs re:r34; emails re:r26 issues | 0.5 |
| 2/19/20 | CT | email from JP re:detected pitons of DNMP | 0.2 |
| 2/21/20 | CT | fwd proposed PO from JH, emails re:same | 0.2 |
| 2/25/20 | CT | review defs email re:scope of r34 | 0.2 |
| 2/26/20 | CT | call w/court clerk, reset mediation date | 0.2 |
| 2/27/20 | CT | work on r34 resp, fwd to DE; review confidentiality draft & respond (.2) | 0.7 |
| 3/2/20 | CT | resp to BioFiltro (BF) conf request | 0.2 |
| 3/3/20 | CT | work on settlement response issues, ph w/DE re:same | 1.7 |

| | | | |
|---------|----|--|-----|
| 3/4/20 | CT | work on settlement response, memo to clients re:same & ph w/DE then HR re:same | 2.9 |
| 3/5/20 | CT | review FOTC comments on sett resp, call w/DE re:same, finalize & send resp | 1.5 |
| 3/6/20 | CT | work on in camera ltr | 1.0 |
| 3/10/20 | CT | work on in camera ltr (1.5); ph w/DE re:r34 (.5) | 2.0 |
| 3/11/20 | CT | respond to defs re:r34 issues, review BF info | 1.4 |
| 3/12/20 | CT | edits to BF question ltr, email to counsel re:further negotiation process | 0.6 |
| 3/16/20 | CT | emails to counsel & experts re:settlement | 0.3 |
| 3/19/20 | CT | work on in camera ltr | 1.3 |
| 3/20/20 | CT | email to counsel re:settlement (.2); email to Court re:4/8 date (.2); memo to clients re:all (.3) | 0.7 |
| 3/21/20 | CT | rsrch on DeCoster/Glessner associates for discovery | 2.8 |
| 3/23/20 | CT | rsrch re:corp & indiv backgrounds, ph w/cocounsel re:same | 1.0 |
| 3/23/20 | CT | emails to court & counsel; call w/CFS re:settlement | 0.5 |
| 3/24/20 | CT | work on sec. NOI & LLC interrelationships | 0.8 |
| 3/24/20 | CT | prep for & call w/court (.5); call w/JK re:settlement (.2) | 0.7 |
| 3/25/20 | CT | edit sec. NOI | 0.6 |
| 3/26/20 | CT | email to JK re:4/1 mtg (.2); ph w/DE re:r34 (.3) | 0.5 |
| 3/27/20 | CT | review resp from defs, fwd same to clients & experts, follow up calls w/clients & DE re:same (.5) | 1.5 |
| 3/30/20 | CT | ph w/clients re:settlement strategy | 0.5 |
| 4/1/20 | CT | prep for & settlement call with all parties (1.5); follow up calls w/cocounsel, experts, client re:same | 2.5 |
| 4/1/20 | CT | work on discovery issues | 0.2 |
| 4/6/20 | CT | work on r34 issues | 0.3 |
| 4/7/20 | CT | disc w/DE re:QAPP for r34 | 0.2 |
| 4/8/20 | CT | call w/court and all parties re:settlement; follow up calls w/cocounsel, experts, client re:same | 1.0 |
| 4/9/20 | CT | edit rfps (1.0); work on special logistics of r34 site visit (.8) | 1.8 |
| 4/10/20 | CT | work on special logistics of r34 site visit | 0.4 |
| 4/13/20 | CT | emails, calls w/counsel re:discovery & r34 | 0.4 |
| 4/23/20 | CT | email to counsel re:r34 | 0.2 |
| 4/24/20 | CT | ph w/JH re:r34 logistics & arrangements | 0.4 |
| 4/27/20 | CT | ph w/DE re:site inspection | 0.2 |
| 4/28/20 | CT | rsrch essential services in Wa, and work w/state of Wa re:same (1.2); work on site visit issues, safety plan (1.0) | 2.2 |
| 4/29/20 | CT | email to counsel re:essential investigation finding by state (.3); review bg files (1.0) | 1.3 |
| 4/30/20 | CT | prep for & call w/court and all parties re:mediation; follow up calls w/experts, client re:same; respond to JK re:request to AS (.2) | 1.4 |

| | | | |
|---------|----|---|------|
| 5/1/20 | CT | work on Covid issues - review safety plan (.5); send to defs w/ scaled back site inv. plan/request (1.0); ph w/ DE re: same (0.2); call w/ DS and PJ re: R34 (0.2) | 1.9 |
| 5/4/20 | CT | review history of Rule 34 scheduling issues & send detailed response to DBD (1.0); comms w/ counsel (.2); & call w/ Court (.2); email to counsel re:call w/ Court (.1) | 1.5 |
| 5/5/20 | CT | draft Rule 34 letter for Judge Rice (1.0); review edits and revise (.5); ph w/ PJ, then AR re:other edits (.2); finalize letter for filing (.3) | 2.0 |
| 5/6/20 | CT | ph w/ DE re:Rule 34 logistics (.2); ph w/ DS re:defs response; work on reply (1.8); ph w/ PJ re:"emergency apps" (.2) | 2.2 |
| 5/7/20 | CT | call w/ Judge Rice re:Rule 34 dispute (.3); prep for call (.3); ph w/ DS & PJ after call (.2); ph w/ J. Hammitt - twice re:logistics (.2); work on site visit logistics (.3); disc w/ PJ re:fields to sample (.3); ph w/ J Mendoza re:learning results (.2) | 1.8 |
| 5/8/20 | CT | emails w/ DS & PJ re:site access agreement & related (.2); ph w/ DE re:Rule 34 issues (.2) | 0.4 |
| 5/11/20 | CT | ph w/ DS & PJ re:site agreement from defs (.3) and review same (.1) | 0.4 |
| 5/12/20 | CT | call w/ DE, MR & PJ re:Rule 34 details (.5); review WMTCA listed in DBD access agreement & edit access proposal (1.0) | 1.5 |
| 5/13/20 | CT | work on access agreement issues, incl call w/ R. Brown, drafter of WMTCA and email to counsel (1.0) | 1.0 |
| 5/14/20 | CT | respond to J Hammitt access agr. & other Rule 34 logistics (.7); read & respond to J Hammitt's late aft.email (.2) | 0.9 |
| 5/15/20 | CT | work on site access agreement & related Rule 34 issues | 1.2 |
| 5/18/20 | CT | travel to Outlook from SEA (3.2); finalize access agreement & related (.7); prep w/ WET team for next day (1.5) | 5.4 |
| 5/19/20 | CT | deal w/ discovery issues (.3); site inspection incl travel to/from hotel (9.7); prep for next day w/ WET team (.5) | 10.5 |
| 5/20/20 | CT | site insp incl travel to/from hotel (10.0); prep for next day w/ WET team (.3) | 10.3 |
| 5/21/20 | CT | travel to site (.3); work on site w/ WET (4.0); travel back to EUG (5.5) | 9.8 |
| 5/22/20 | CT | review discovery docs about emergency apps & NRCS | 0.3 |
| 5/27/20 | CT | ph w/ DE re:site visit follow up issues (.2); email to counsel re:site visit (.1); disc w/ PJ re: discovery issues (.1) | 0.4 |
| 5/28/20 | CT | strategy call w/ PJ & DS (.7); call w/ DS re:following discovery issues (.2); email to counsel re:subpoenas & deps (.3) | 1.2 |
| 6/1/20 | CT | edit Rule 37 ltr for PJ to serve | 0.5 |
| 6/2/20 | CT | ph/ Judge Suko about mediation issues (.7); review dep. email (.2) | 0.9 |
| 6/3/20 | CT | debrief PJ & DS re:settlement & scheduling issues /discovery | 0.2 |
| 6/9/20 | CT | review defs Rule 37 response (.4); review docs referenced (.4); comm. reply w/ PJ & DS (.2) | 1.0 |
| 6/11/20 | CT | review depo date email & respond | 0.3 |

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| 6/12/20 | CT | email w/ def counsel re:mediation & sched Order | 0.4 |
| 6/15/20 | CT | review of prelim water data & disc w/ DE | 0.3 |
| 6/16/20 | CT | call w/ Judge Suko & all parties re:mediation | 0.7 |
| 6/17/20 | CT | review site access agreement & send request to WET for site visit docs | 0.3 |
| 6/23/20 | CT | ph w/ J. Mendoza re:mediation (.3); ph w/ A VanSaun re:mediation (.2); ph w/ D. Erickson re:sample results (.3); ph w/ PJ & DS re:sampling (.2) | 1.0 |
| 6/24/20 | CT | prep for mediation (1.0); respond to JH re:exchange of docs (.2); travel YKM (3.0); mtg w/ client H. Reddout (.3); call w/ J Mendoza (.2); call w/ Judge Suko (.2); ph w/ DE re:samples (.3); disc w/ PJ in prep (.2) | 5.4 |
| 6/25/20 | CT | Settlement Conference | 8.6 |
| 6/26/20 | CT | Settlement Conference | 11.2 |
| 6/29/20 | CT | emails to counsel & experts re:stop work & results of mediation (.4); ph w/ DE re:follow up (.2); ph w/ DS re:CD issues (.2) | 0.8 |
| 6/30/20 | CT | ph w/ Judge Suko re:remaining issues | 0.2 |
| 7/1/20 | CT | email to JH re:remaining issues | 0.2 |
| 7/2/20 | CT | ph w/ Judge Suko re:stay, etc (.2); work on draft CD (1.0) | 1.2 |
| 7/3/20 | CT | work on draft CD | 0.7 |
| 7/6/20 | CT | email to co counsel re:expert fees | 0.2 |
| 7/8/20 | CT | work on fee & cost proposal | 0.7 |
| 7/13/20 | CT | work w/ PJ on SMD lagoon sampling issues & related | 0.3 |
| 7/27/20 | CT | work on fee proposal & send to defs | 0.7 |
| 8/12/20 | CT | disc w/ PJ re:settlement call w/ JH | 0.2 |
| 8/14/20 | CT | preliminary look at Consent Decree | 0.4 |
| 8/18/20 | CT | redline draft CD (1.5); ph w/ DE re:"differential" and review same (.4); ph w/ PJ & J Hammitt re:CD issues (.5) | 2.4 |
| 8/19/20 | CT | email to J Hammitt re:fee issues | 0.2 |
| 8/24/20 | CT | work on CD | 2.0 |
| 8/25/20 | CT | work on CD edits (1.4); draft cover email to defs w/ CD (.3); edit CD for sending to defs & Judge Suko (.4) | 2.1 |
| 8/26/20 | CT | final edits & send CD to defs & Judge Suko (.5); ph w/ DE re:"differential" issues in CD (.2) | 0.7 |
| 8/31/20 | CT | ph w/ DE re:"differential" definition | 0.2 |
| 9/2/20 | CT | email follow up re:"differential" definition | 0.2 |
| 9/4/20 | CT | review request for stay ext & respond re:SAP/QAPP (.3); disc w/ PJ re:discovery/sched order issues (.2); memo to DS & PJ re:outstanding issues (.3); respond to stay request (.1); read DBD settlement response & fwd to client (.3) | 1.2 |
| 9/8/20 | CT | review claims made by defs in settlement response, particularly WAC & guidelines (1.2); work on draft response (1.3) | 2.5 |
| 9/9/20 | CT | respond to JH re:mediation (.2); work on response (.6); call w/ DE re:DBD response issues (.2) | 1.0 |
| 9/10/20 | CT | ph w/ PJ re:settlement issues and review docs | 0.3 |

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| 9/11/20 | CT | email to counsel re:working w/ Judge Suko and call w/ Judge Suko's clerk (.2); work on response to CD issues (.3) | 0.5 |
| 9/14/20 | CT | call w/ Judge Suko & DBD re:scheduling (.6); prep for same (.2); call w/ PJ & DE after (.2) | 1.0 |
| 9/15/20 | CT | ph w/ J Mendoza (FOTC) re:settlement | 0.2 |
| 9/16/20 | CT | work on issues for ltr on settlement | 2.7 |
| 9/17/20 | CT | work on ltr response to 9/4 ltr (.5); finalize & send (.8) | 1.3 |
| 9/18/20 | CT | email with PJ re:in camera ltr of settlement | 0.2 |
| 9/21/20 | CT | review GW mon. article for "differential" (.7); ph w/ Judge Suko re:copies & related (.3); email to JH re:in camera ltrs (.1) | 1.1 |
| 9/22/20 | CT | ph w/ J Hammitt re:SMD sampling (.2); ph w/ D Erickson (twice) re:lab sampling (.2); email to JH re:labs (.1); ph w/ DE re:site well issues (.2); ph w/ P Ryan and then w/ R Brambilo re:same (.3); ph w/ DE to follow up (.2) and email to all parties (.1) | 1.3 |
| 9/23/20 | CT | work on in camera ltr to Judge Suko (1.0); ph w/ DE re:soil test labs & email to DBD re:same (.2); finalize in camera ltr (.4) | 1.6 |
| 9/24/20 | CT | Calls with DS and PJ re:mediation | 1.2 |
| 9/25/20 | CT | ph w/ Judge Suko re:mediation issues | 0.2 |
| 9/28/20 | CT | travel to YKM for mediation (2.4); prep for mediation (2.5) | 4.9 |
| 9/29/20 | CT | mediation in YKM 8:30-4 (incl post mtg w/ client) (7.5); & travel back to SEA (3.0); call w/ DE after (.2) | 10.7 |
| 9/30/20 | CT | ph w/ client H Reddout re:settlement mtg | 0.2 |
| 10/1/20 | CT | review Suko Orders & email defs w/ proposed new dates & req. for settlement dates | 0.5 |
| 10/7/20 | CT | ph w/ S. Odell re:scheduling | 0.3 |
| 10/8/20 | CT | edit & send stip sched order motion to defs | 0.4 |
| 10/9/20 | CT | follow up w/ SD re:sch. Order changes (.2); emails w/ S. Odell re:settlement & sch. Order (.2) | 0.4 |
| 10/12/20 | CT | finalize sch. Order stip (.2); ph conf w/ PJ & DS re:case strategy (.4) | 0.6 |
| 10/13/20 | CT | strategy & case plan call w/ DS & PJ (.9); email to DBD requesting video & sampling results (.2); edit litigation ltr to defs (.3); read & edit proposed PO (1.2) | 2.6 |
| 10/14/20 | CT | prep for (.2) & call w/ Judge Suko, S. Odell & PJ re:settlement possibilities (.9); disc w/ DS & PJ re:lit ltr (.2); work on lit ltr (.4); work on PO (.4); finalize & send ltr & PO (.5) | 2.6 |
| 10/15/20 | CT | ph w/ M Russelle re:expert issues (.3); ph w/ H Reddout re:trial & case strategy (.3) | 0.6 |
| 10/16/20 | CT | ph w/ DE re: expert report & further Rule 34 work | 0.2 |
| 10/21/20 | CT | sent reminder to defs to respond to 10/14 ltr | 0.1 |
| 10/22/20 | CT | response to S. Odell re:case matters (.4); ph w/ Judge Suko re:case status (.2) | 0.6 |

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| 10/23/20 | CT | ph w/ DS & PJ re:dep notices & discovery follow up (.3); work on dep notices to Glessner & Cummings (.5) ph w/ Central Ct Rept (.2); finalize & send dep notices w/ cover memo to S. Odell (.9); review Odell response (.1) | 2.0 |
| 10/26/20 | CT | ph w/ DS re:call tomorrow | 0.2 |
| 10/27/20 | CT | call w/ S. Odell, PJ & DS re: multiple litigation & settlement issues (1.0), prep for call w/ DBD (.3); ph w/ DS before:call (.3); call w/ DS & PJ after call to discuss follow up (.2); call w/ DS re:Burford issues (.2) | 2.0 |
| 10/28/20 | CT | work on follow up ltr to S. Odell (.7); review notes from 10/27 call & disc w/ PJ (.2); ph w/ S. Odell & DS & PJ re:discovery issues (1.0); ph w/ client CAre:re: case status (.2); ph w/ H Reddout re:community member(.2); ph w/ woman (RM) re:DBD applications near her property (.7) | 3.0 |
| 10/29/20 | CT | ph w/ PS & DJ re:follow up on discovery (.2); ph w/ AVS re:membership (.2); revise follow up ltr to DBD & send (1.2); edit 30(h)(6) notice (.3) | 1.9 |
| 10/30/20 | CT | review responses from S. Odell & respond (.3); call w/ H Reddout re:resident (.1) prep for Glessner dep (1.0) | 1.3 |
| 11/2/20 | CT | prep for Glessner dep - reading discovery responses & docs (4.2) ph w/ DE re:Rule 34 on 12/8-10 (.3); ph w/ PJ (multiple times) re:various discovery docs (.3); ph w/ ct. reporter re:11/10 dep. (.3); email w/ S. Odell re:discovery issues (.2) | 5.3 |
| 11/3/20 | CT | prep for Glessner dep (3.7); emails w/ S. Odell re:call w/court (.2) | 3.9 |
| 11/4/20 | CT | prep for Glessner dep (1.2); emails w/ S. Odell re:court hearing (.2); ph w/ DS & PJ re:same & other discovery (.3) | 1.7 |
| 11/5/20 | CT | review discovery dispute ltr to court & disc w/ PJ & DS (1.6); review defs position ltr (.3) & fwd to clients; work on PO & email to S. Odell about same & other discovery (.6) | 2.5 |
| 11/6/20 | CT | prep for call w/ court (.4); call w/ court re:scheduling (.4); ph w/ DS & PJ to discuss follow up needs (.3); review minutes & notes of call (.1) | 1.2 |
| 11/9/20 | CT | email to Odell re:discovery matters (.2); ph w/ DE re:further data needs (.2); ph w/ PJ & DS re:discovery issues (.2) | 0.6 |
| 11/10/20 | CT | emails w/ S. Odell re:discovery (.2); ph w/ client J. Mendoza re: next steps (.2) | 0.4 |
| 11/11/20 | CT | prep for (.2) and call w/ S. Odell, DS & PJ re:ongoing discovery issues, ph w/ PJ & DS after (.2) | 0.9 |
| 11/12/20 | CT | edit follow up ltr to DBD on discovery | 0.3 |
| 11/13/20 | CT | finalize PO & return to S. Odell w/ short memo | 0.3 |
| 11/16/20 | CT | call w/ Judge Suko re:status of negotiations | 0.2 |
| 11/17/20 | CT | email from court re:PO (.1); email to S. Odell re:Ex. A after file review (.2) | 0.3 |
| 11/18/20 | CT | review Ex. A to PO & respond to S. Odell w/ other text & other discovery matters | 0.3 |
| 11/19/20 | CT | work on prep for Cummings /Glessner deps on LLC interplay (.5), disc w/ PJ re:needs for deps (.2) | 0.7 |

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| 11/20/20 | CT | disc w/ PJ re:following needs & deadlines (.2); ph w/ DE re:follow up issues (.1) | 0.3 |
| 11/21/20 | CT | initial review of doc production (.4) | 0.4 |
| 11/22/20 | CT | initial review of "confidential" information (.4); review other discovery production (1.2); emails w/ PJ re:next steps (.2) | 1.8 |
| 11/23/20 | CT | ph w/ PJ & DS re:follow up ltr re:discovery insufficiencies (.3); edit & send discovery ltr (.4) | 0.7 |
| 11/24/20 | CT | training w/ Central Ct Rpt for depositions (.6); review "confidential" docs in prep for depositions (1.5) | 2.1 |
| 11/25/20 | CT | initial review of 2d supp. disc. responses in prep for depositions | 0.7 |
| 11/30/20 | CT | ph w/ DS deposition prep issues (.2); ph w/ PJ re:discovery response & dep prep (.2); work on discovery problem letter (1.2) | 1.6 |
| 12/1/20 | CT | finalize & send discovery ltr w/ email to S. Odell re:meet & confer (.3); email w/ Odell (.1); review docs for Glessner & Cummings dep (3.2) | 3.6 |
| 12/2/20 | CT | review DBD discovery ltr and read cases cited in prep for call w/ Odell (.7); call w/ Odell & PJ re:depositions & discovery problems (.9); prep for dep (2.3) | 3.9 |
| 12/3/20 | CT | prep for Glessner dep (all day) | 9.5 |
| 12/4/20 | CT | Glessner dep (6.0) & morning prep (.5); disc w/DS & PJ re: litigation plan (.3) | 6.8 |
| 12/6/20 | CT | work w/ PJ in prep for Cummings dep (.8) | 0.8 |
| 12/7/20 | CT | Cummings dep by PJ, I assisted PJ (3.5); ph w/ PJ & DS in & follow up (.3) set up for dep (.3); ph w Judge Suko re:settlement (.3); ph w/ DE re:dep info obtained (.3) | 4.7 |
| 12/8/20 | CT | memo to S. Odell w/ settlement offer | 0.3 |
| 12/9/20 | CT | ph w/ J Mendoza re:settlement & case strategies | 0.5 |
| 12/10/20 | CT | edit confidentiality challenge (.3); left VM for S Odell (.1); ph w/ client H Reddout re:case status issues (.2) | 0.6 |
| 12/11/20 | CT | ph w/ T Marskill re:corporate shell research issues (.5); ph w/ DE re:upcoming issues (.1) | 0.6 |
| 12/14/20 | CT | ph w/ A Steiner re:corporate shell research (.3); ph w/ S. Odell re:discovery problems & case status (.4) | 0.7 |
| 12/15/20 | CT | ph w/ PJ re:call w/ SO & next steps (.2); ph w/ DS re:SO call and discovery problems (.2); review Glessner dep for links to DeCoster (1.5) | 1.9 |
| 12/16/20 | CT | spoliation and related discovery call w/ PJ & DS | 0.3 |
| 12/21/20 | CT | ph w/ PJ re:discovery & NOI issues (.2); review discovery outline & email DS & PJ re:same (.2); email to S Odell re:30(b)(6) failures (.2) | 0.6 |
| 12/22/20 | CT | ph w/ DS re:spoliation ltr (.2); ph w/ PJ re:discovery issues (.2) & NOI LLCs (.2) | 0.6 |
| 12/23/20 | CT | review email from S Odell re:30(b)(6) (.1); ph w/ DS re:spoliation ltr (.2); work on spoliation ltr & send to defs (.6) | 0.9 |
| 12/28/20 | CT | review dep notices for Chavarins; disc w/ PJ | 0.3 |

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| 1/5/21 | CT | review 30(b)(6) designs to determine deposition needs (.3); ph w/ PJ & DS to discuss discovery failures by DBD (.5); ph to L. Terry re:Genny DeRuyter (.1) | 0.9 |
| 1/6/21 | CT | review "conf designation" email (.1); ph w/ DS re:discovery response plan (.2) | 0.3 |
| 1/7/21 | CT | review SO spoliation response & related emails (.2); ph w/ DS & PJ re:adding parties & add. discovery (.4); ph w/ CLF re:health expert (1.2); memo to potential expert upon review of Lawrence report (.6) | 2.4 |
| 1/8/21 | CT | edit G. DeRuyter subpoenas & disc w/ PJ (.3); ph w/ J. Nelson re:G. DeRuyter sub. (.2) | 0.5 |
| 1/11/21 | CT | ph w/ DS re:motion to amend issues (.2); review subpoena to DeCoster (.3) | 0.5 |
| 1/12/21 | CT | ph w/ S. Odell re:multiple case mngt & discuss issues (.8); ph w/ PJ re:J DeCoster subpoena (.1); ph w/ court clerk (BF) re:request for hrs (.2); ph w/ A. Steiner re:DeCoster research (.2); ph w/ J. Nelson re:G. DeRuyter subpoena (.2); ph w/ DS & PJ re:follow up on adding parties & discovery re:S. Odell call (.5) | 2.0 |
| 1/13/21 | CT | work on discovery issues (.2); prep for hearing on scheduling issues (.7); call w/ Judge Rice (.4); ph w/ DS & PJ follow up (.2); email w/ health expert report (.2) | 1.7 |
| 1/14/21 | CT | review DeCoster Ent SDT & disc, w/ PJ | 0.2 |
| 1/15/21 | CT | edit & send 30(b)(6) conferral ltr (.5); ph w/ J. Nelson (twice) re:rescheduling G.D. depo (.2); ph w/ S. Odell re:various depo issues (.2) | 0.9 |
| 1/20/21 | CT | ph conf w/ S. Odell & PJ & DS re:numerous discovery failures & delays by def (.8); follow up call & notes w/ PJ & DS (.2) edit, send discovery follow up email (.4) | 1.4 |
| 1/22/21 | CT | ph w/ DS re:various issues | 0.2 |
| 1/25/21 | CT | review GDR docs for dep | 1.4 |
| 1/26/21 | CT | prep for G. De Ruyter dep - review docs provided by G. DeRuyter | 1.7 |
| 1/27/21 | CT | prep for (3.0), Genny DeRuyter depo (1.5); follow up w/ DS & PJ (.3) | 4.8 |
| 1/28/21 | CT | review Odell ltr re:discovery problems and send notes to DS & PJ (.3); ph w/ DS re:defs discovery failures & motion to compel/sanctions (.2) | 0.5 |
| 2/1/21 | CT | review updated discovery responses | 0.3 |
| 2/2/21 | CT | ph w/ DS re: motion to compel/sanctions | 0.3 |
| 2/3/21 | CT | ph w/ DS (twice) re: Odell email & response, motion to compel & related discovery (.6); ph w/ PJ re: De Coster issues (.2) | 0.8 |
| 2/4/21 | CT | ph w/ DS & PJ re:subpoenas and other discovery issues | 0.2 |
| 2/8/21 | CT | follow up email to SO re: multiple issue response | 0.2 |
| 2/9/21 | CT | review 2d set of discovery (.2) & mtg w/ PJ to discuss strategy & changes (.5) | 0.7 |

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| 2/10/21 | CT | review Glessner errata sheet & email DS & PJ (.2); review recent discovery prod. (.3); prep call w/ DS & PJ for call w/ SO (.5) call w/ SO & PJ & DS re:multiple discovery failures, meet & confer & notice about SMD lagoon abandonment (1.0); ph w/ DS after to discuss follow-up (.3) | 2.5 |
| 2/11/21 | CT | debrief client J Mendoza of activities and strategy (.8); ph w/ PJ & DS re: follow up discovery issues (.1); edit follow up ltr re: 2/10 call w/ SO (.6); edit 2d progs & 1st RFAS (.4) | 1.9 |
| 2/12/21 | CT | review emails re: discovery hrg (.1) review Odell emails re: follow up ltr (.2); phone w/ DS & PJ re: discovery problems (.3); email Odell re: scheduling (.1) | 0.7 |
| 2/13/21 | CT | read Odell email re:hrg dates & respond | 0.2 |
| 2/15/21 | CT | review Volpe response re: JDC & reply (.2) & research Volpe (.2) | 0.4 |
| 2/16/21 | CT | email to court re: hrg date (.1); call w/ Volpe re: JDC dep & case background issues (.7); review Glessner dep for adding parties (.6); send DeCoster Ent info to F. Volpe at his request (.2) | 1.6 |
| 2/17/21 | CT | edit ltr to Judge Rice re:discovery disputes (.8); strategy on motion (.2) | 1.0 |
| 2/18/21 | CT | call w/ DS & PJ discovery motion | 0.2 |
| 2/19/21 | CT | edit letter to court re: discovery (.4); review def's submission (.2); prep notes for oral argument on discovery notion (.6) | 1.2 |
| 2/22/21 | CT | read cases cited by def (1.0) and discuss response w/ DS & PJ (.3) | 1.3 |
| 2/23/21 | CT | edit discovery response to Court (.4); review defs response (.2); prep for hrg (.7) | 1.3 |
| 2/24/21 | CT | call w/ court (.4) & prep for same (.5); call w/ DS & PJ to discuss next steps in discovery (.2); email to F. Volpe re: De Coster subpoenas (.2); edit follow up to Odell (.2) | 1.5 |
| 2/25/21 | CT | call with DS to discuss DeCoster options | 0.2 |
| 3/1/21 | CT | draft concerns about discovery delay | 0.2 |
| 3/2/21 | CT | follow up emails to Volpe & Odell re: call, subpoenas and other discovery | 0.5 |
| 3/4/21 | CT | call w/ counsel (SO, FV, DS & PJ) to discuss case status (.5); ph w/ DS before:& after call to discuss follow up (.2); follow up email to counsel (.2); email w/ Dr. Kneehwun re: expert report (.5); review subpoenas to WAI & WDH & comm w/ PJ re: same (.4); work on case strategy (.5) | 2.3 |
| 3/5/21 | CT | call w/ DS & PJ re: dep & discovery issues (.3), email SO re: dep dates for numerous def witnesses (.5) | 0.8 |
| 3/8/21 | CT | memo to F. Volpe re: joining DeCoster (.5); response to J.Kray re: deps (.3) | 0.8 |
| 3/9/21 | CT | ph w/ DS re: discovery issues | 0.3 |
| 3/10/21 | CT | call with co-counsel re: closure:(.7); ph w/ DS re: DBD discovery requests (.2) ph w/ DS & PJ after closure:disc. (.2); ph w/ A. Steiner re: adding parties (.3); ph w/ DW to talk decommissioning (.2); email to clients to discuss (.2) | 1.8 |

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| 3/11/21 | CT | ph w/ PJ & DS re: stay issues (.2); ph w/ client J. Mendoza re: news about closure:(.4); income to co-counsel re: case status and general plan & request for feed to date (.4); emails to experts to stop work (.3) | 1.3 |
| 3/12/21 | CT | work on case issues & emails w/ J. Kray re: stay | 0.4 |
| 3/16/21 | CT | emails w/ J. Kray re: closure/stay (.2); read review on "measure:of control" (.3) | 0.5 |
| 3/17/21 | CT | corresp re: "measure:of control" (.2); emails w/ Kray (.2) | 0.4 |
| 3/18/21 | CT | ph w/ counsel re: posture:of case (.4); ph w/ PJ & DS after (.1) | 0.5 |
| 3/19/21 | CT | ph w/ J. Kray and to court re: stay issues | 0.3 |
| 3/23/21 | CT | work on stay draft (.6); ph w/ J. Mendoza re: DBD stay issues (.3) review pictures with client JM and send to JK & FV (.3); ph w/ JK (.2) | 1.4 |
| 3/24/21 | CT | review & approve motion to stay & respond to JK | 0.2 |
| 4/9/21 | CT | ph w/ client J. Mendoza re: case states | 0.2 |
| 4/22/21 | CT | ph w/ J Kray re: statute of closure:plan | 0.3 |
| 4/23/21 | CT | preliminary review of Farallon work plan (.5); disc w/ PJ re: DBD "plan" (.3); ph w/ JK, Farallon, PJ & DE (1.5); ph w/ DE & PJ after (.2); ph w/ DE before:call (.3) | 2.8 |
| 4/26/21 | CT | prep for (.3) and call w/ Jeff Kray & PJ re: further stay of proceedings (.3); ph w/ P Jaffer (.2); draft proposed stay (1.0); phone w/ client FOTC re: draft stay (.2) | 2.0 |
| 4/27/21 | CT | review client comments on stay, revise and send to J. Kray (.7); send request to court (.2) | 0.9 |
| 5/3/21 | CT | review def's response to stay stip (.3); ph w/ PJ re: agreement on field apps (.1); send response to defs re: stay stip and fees w/ short side agreement (.4) | 0.8 |
| 5/7/21 | CT | disc w/ PJ re: site visit issues (.2); ph w/ DE re: site visit (.1) | 0.3 |
| 5/10/21 | CT | emails w/ J. Kray re: stay & fees (.2); ph w/ J. Kray (.2); draft interim fee agreement (1.0) | 1.4 |
| 5/11/21 | CT | ph w/ DE & PJ re: site visit plan & follow up email to J. Kray (.4) | 0.4 |
| 5/12/21 | CT | ph w/ DE re: site visit issues (.2); edit & email fee draft to J. Kray (.2) | 0.4 |
| 5/13/21 | CT | ph w/ PJ & DE re: site visit update | 0.3 |
| 5/14/21 | CT | ph w/ DE re: mtg w/ Farallon & follow up | 0.2 |
| 5/19/21 | CT | edit site visit ltr & send | 1.0 |
| 5/21/21 | CT | follow up email to J. Kray re: fees | 0.1 |
| 5/24/21 | CT | review& respond to J. Kray re: fee stip (.2); ph w/ DE re: follow up issues (.2) | 0.4 |
| 6/10/21 | CT | review & respond to JK email & call | 0.2 |
| 6/11/21 | CT | ph w/ J. Kray re: site issues | 0.3 |
| 6/14/21 | CT | emails w/ DE & J. Kray re: meeting times | 0.2 |
| 6/15/21 | CT | email to experts re: action plan for property | 0.3 |
| 6/17/21 | CT | call with experts (1.4) call with DE before:mtg (.2) & after mtg (.2) | 1.8 |
| 6/18/21 | CT | ph w/ DE re: GW issues | 0.2 |

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| 6/20/21 | CT | work on GW mon email to JK & texts w/ DE re: same | 0.4 |
| 6/21/21 | CT | ph w/ DE (twice) re: site progress & MWs (.4); ph w/ PJ re: site issues (.2) | 0.6 |
| 6/22/21 | CT | ph w/ DE (twice) re: site wells (.2); ph J.K. & email re: site well placement (.3) | 0.5 |
| 6/28/21 | CT | review records provided today (1.3); ph w/ PJ re: problems & next steps (.2); review MTS & docket & email JK re: stats report (.3) | 1.8 |
| 6/29/21 | CT | ph w/ PJ & DS re: data & status report | 0.2 |
| 6/30/21 | CT | review data overlays (.2); ph w/ J Kray re: joint status report (.2) | 0.4 |
| 7/2/21 | CT | review draft joint status report and respond (.4); ph w/ client FOTC re: stay (.2) | 0.6 |
| 7/23/21 | CT | initial review of data (.7) from Farallon; ph w/ DE & PJ re: data & next steps (.4) | 1.1 |
| 7/29/21 | CT | initial review of Farallon notes & fwd to DE | 0.2 |
| 7/30/21 | CT | review field notes from MWS by Farallon | 0.5 |
| 8/4/21 | CT | call w/ Kray & Farallon & PJ & DE (1.0); prep for call & email to J. Kray (.5); call w/PJ & DE after (.2) | 1.7 |
| 8/24/21 | CT | review transition plan (1.3); ph w/ DE re: same (.2); ph w/ PJ re: response to plan (.2) | 1.7 |
| 8/25/21 | CT | work on response letter to Transition Plan & forward to clients for approval | 1.0 |
| 9/1/21 | CT | ph w/ J. Kray re: need for scheduling conference (.3); draft & send request to Court after reviewing docket (.4) review discovery status and draft proposed scheduling order (1.3); ph w/ DE re: trial schedule (.2); ph w/ DS & PJ re: scheduling (.2) | 2.4 |
| 9/3/21 | CT | email J. Kray re: new proposed scheduling order | 0.2 |
| 9/8/21 | CT | ph w/ DE re: expert report timing & issues | 0.2 |
| 9/13/21 | CT | revise & send reissued proposed schedule to J.Kray & then send revised version to Court | 0.5 |
| 9/15/21 | CT | status conf w/ Judge Rice & prep for same | 0.3 |
| 9/20/21 | CT | ph w/ PJ & DS re: DeCoster subpoena and other discovery | 0.2 |
| 9/23/21 | CT | ph w/ PJ & DS re: next steps | 0.2 |
| 9/29/21 | CT | work on response to disco ltr from DBD & send (.4) ph w/ DE (.2) | 0.6 |
| 10/4/21 | CT | review docket & respond to F.Volpe re: DeCoster deps | 0.3 |
| 10/8/21 | CT | review 1 st production and corresp from DBD (.3) ph w/ PJ & DS re: responses & motion to add (.4) email to F.Volpe re: dep dates (.1) review corresp re: search terms & fwd to DS to draft response (.2) ph w/ DE re: various (.1) ph w/ PJ re: disco issues (.3) ph w/standee (.3) | 1.7 |
| 10/11/21 | CT | response to F.Volpe re: DeCoster deps & mot. to add (.4) review, edit draft responses to defendants discovery (1.0) | 1.4 |
| 10/12/21 | CT | ph w/ PJ re: disco responses | 0.2 |
| 10/13/21 | CT | email w/ F.Volpe re: deps/amendment | 0.2 |

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| 10/19/21 | CT | review discovery issues re: recent production | 0.3 |
| 10/20/21 | CT | work on amended complaint & disc w/ PJ | 1.0 |
| 10/21/21 | CT | review Amended Complaint & send w/ note to all counsel re: possible stip (.5) review & edit R37 ltr (.5) | 1.0 |
| 10/25/21 | CT | respond to F. Volpe re: adding parties (.3) ph w/ DS re: same (.1) respond to J.Kray re:M&C (.2) review discovery responses in prep for call (.8) | 1.4 |
| 10/27/21 | CT | Zoom conf w/ J.Kray, MG, JF, DS, PJ & CT re: discovery M&C, adding parties & search terms (1.0) ph w/ DS & PJ re: stip & other follow up (.2) | 1.2 |
| 10/28/21 | CT | review & send proposed FAC stip (.2) emails w/ F.Volpe re: stip (.2) disc w/ PJ re: search terms (.1) | 0.5 |
| 11/1/21 | CT | review corresp & send reminder to counsel re: stip | 0.2 |
| 11/2/21 | CT | review defendants stip language & send to PJ | 0.3 |
| 11/3/21 | CT | ph w/ DS & PJ re: FAC attachments | 0.2 |
| 11/4/21 | CT | emails w/ counsel re: FAC issues | 0.2 |
| 11/8/21 | CT | ph w/ PJ & DS re: FAC & related issues (.3) review & edit stip & send to all counsel (.4) edit FAC & disc w/ PJ(.4) emails w/ counsel re: stip & FAC (.3) | 1.4 |
| 11/9/21 | CT | ph w/ DS & PJ re: deps, disco & case strategy | 0.3 |
| 11/12/21 | CT | email to J.Kray reminding him of response (& service disc w/ PJ) | 0.2 |
| 11/15/21 | CT | review disco corresp (.2) review field app docs (.2) disc w/ PJ & DS re:complaint service (.2) | 0.6 |
| 11/16/21 | CT | emails re: service & acceptance (.3) review corresp re: discovery issues (.2) | 0.5 |
| 11/17/21 | CT | emails re: service w/ F.Volpe | 0.2 |
| 11/22/21 | CT | email to F.Volpe re: M&C on subpoenas | 0.2 |
| 11/23/21 | CT | ph w/ DS & then to PJ re: cert of service (.2) edit decl & proof of service (.2) | 0.4 |
| 11/29/21 | CT | visit sites on public roads (.5) disc w/ PJ re: updated deps (.1) | 0.6 |
| 11/30/21 | CT | visit sites on public roads w/ DE & disc. | 1.0 |
| 12/2/21 | CT | emails w/ F.Volpe re: STD response from DeCoster Ent. (.2) disc & email w/ PJ & DS about how to respond & send response (.2) | 0.4 |
| 12/3/21 | CT | emails w/ JF re: SDT on DeCoster | 0.2 |
| 12/8/21 | CT | follow up email re: DeCoster Ent. SDT & MTD lang | 0.2 |
| 12/9/21 | CT | prep for Jack DeCoster dep – research | 1.0 |
| 12/13/21 | CT | ph w/ DS re: DeCoster Ent. production & Glessner doc failures (.2) ph w/ PJ re: discovery issues (.2) review Glessner issues & send email to J.Kray (.7) | 1.1 |
| 12/16/21 | CT | prelim review of MTDs (.5) ph w/ PJ re: MTDs (.2) | 0.7 |
| 12/20/21 | CT | prep for J.DeCoster dep | 1.5 |
| 12/21/21 | CT | prep for J.DeCoster dep | 4.7 |
| 12/22/21 | CT | prep for dep (1.0) dep of J.DeCoster (6.5) (on the record about 4 hrs); ph w/ DS & PJ after dep (.2) prep for second day (.7) | 8.4 |

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| 12/23/21 | CT | continuation of DeCoster dep (1.8) prep for same (.7) ph w/ DS after to discuss dep & next steps (.2) | 2.7 |
| 12/27/21 | CT | Review & analyze DeCoster MTD (.7) review & analyze DBD & WA MTDs (.8) | 1.5 |
| 1/3/22 | CT | Draft & send email to all counsel re: Glessner & DeCoster settlement agreement & settlement issues for DBD/SMD | 1.2 |
| 1/5/22 | CT | work on response to NOI MTD | 1.3 |
| 1/6/22 | CT | ph w/ PJ & DS re: MTD response issues (.2); work on response to NOI MTD (1.3); draft response to lift PO as to certain docs (.5); & disc w/ PJ (.2) | 2.2 |
| 1/10/22 | CT | confer w/ DS re: MTD responses (.1); edit Notice MTD response (.5); edit WAI/WDH MTD response (1.0); edit DeCoster MTD resp (1.0) | 2.6 |
| 1/11/22 | CT | WAI/WDH response edits (2.0); ph w/ DS re: partial motions to lift PO (.2); ph w/ AVS re: same (.2); work on DeCoster response (2.2); ph w/ DE re: factual issues at site (.2) | 4.8 |
| 1/12/22 | CT | final review of WA defendants MTD on notice (.4); ph w/ DS re: response issues (.2); memo to CFS re: motion to unseal / lift confidentiality w/ background documents (.6); final review of WAI/WDH MTD response (1.4) | 2.6 |
| 1/13/22 | CT | MTD responses final edits (.6); edit CT decl. (.5); ph w/ PJ & DS re: tasks & edits (.3); ph w/ PJ filing issues (.2); ph w/ B. Fortenberry re: filing under seal (.1) | 1.7 |
| 1/19/22 | CT | ph w/ PJ re: motion to lift / unseal (.2); draft motions to unseal & expedite (1.5); edit CT declaration (.7) | 2.4 |
| 1/20/22 | CT | edit motion to unseal (.4); edit CT decl. (.4); edit Mot.to Exp. (.3); respond to JF (.1) | 1.2 |
| 1/21/22 | CT | read DeCoster opp.to mot.to exp. (.2); & DBD's (.2); ph w/ DS re: same (.1) | 0.5 |
| 1/24/22 | CT | ph w/ PJ & DS re: discovery issues re: unsealing, etc | 0.2 |
| 1/28/22 | CT | read replies | 1.2 |
| 2/1/22 | CT | prep for oral arg | 1.3 |
| 2/2/22 | CT | emails w/ counsel re: conferral on arg (.5); prep for oral arg (reading briefs, exhibits, complaint, notes) (6.2) | 6.7 |
| 2/3/22 | CT | oral arg.on MTD's (.8); prep for arg (2.7); ph w/ legal team after arg (.3); call w/ lawyers re: oral arg. (.2) | 4.0 |
| 2/4/22 | CT | review DBD doc.production | 0.3 |
| 2/7/22 | CT | read order on MTD and related motions to unseal (.7); disc w/ DS & PJ re: same (.3) | 1.0 |
| 2/8/22 | CT | ph w/ DS & PJ re: discovery needs after MTD | 0.2 |
| 2/14/22 | CT | ph w/ J. Kray & F. Volpe re: possible settlement | 0.2 |
| 2/16/22 | CT | review settlement corresp (.6); ph w/ DE re: upcoming call (.2); ph w/ FV, LF, PJ, DE & SS (twice) (.8); ph w/ DS & PJ re: next steps (.2) | 1.8 |

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| 2/17/22 | CT | ph w/ DE re: next steps & needs | 0.2 |
| 2/24/22 | CT | ph w/ all counsel & experts re: settlement issues (2.0); ph w/ DE after (.2) | 2.2 |
| 3/4/22 | CT | Review & respond to FV email re: scheduling (.2); ph w/ PJ & DS re: next steps (.1) | 0.3 |
| 3/14/22 | CT | ph w/ DS re: next steps (.2); and Rule 37 ltr | 0.2 |
| 3/22/22 | CT | memo to client FOTC re: case status | 0.2 |
| 3/23/22 | CT | ph w/ DS & PJ re: next steps (.2); review docs of data for conf. (.4) | 0.6 |
| 3/24/22 | CT | edit discovery ltr to DBD | 0.5 |
| 3/28/22 | CT | ph w/ DS re: DBD discovery (.1); mtg w/ FOTC board re: case status update (.2); emails w/ F. Volpe re: proposal status (.1) | 0.4 |
| 4/6/22 | CT | review file for context of strength of case for expected settlement offer | 0.7 |
| 4/11/22 | CT | ph w/ R. Wassemiller re: apps to Schuimk prop next to her house | 0.3 |
| 4/14/22 | CT | initial review of proposal from defendants (.6); memo to clients re: proposal (.3) | 0.9 |
| 4/21/22 | CT | ph w/ DE, PJ & DS re: DBD settlement request & needs for site remediation (.5); ph w/ PJ & DS re: same (.4); ph w/ D.Reddout-CARE- re: next steps (.5); ph w/ AVS-CFS-re: next steps (.2); ph w/ JM-FOTC & AVS-CFS re: next steps (.5) | 2.1 |
| 4/22/22 | CT | ph w/ D.Charles & email to him (.3); ph w/ J.Glessner re: possible mtg (.3); ph w/ F.Volpe re: same (.3); ph w/ H.Reddout (.3) | 1.2 |
| 4/25/22 | CT | ph w/ FOTC bd re: settlement issues (.8); ph w/ DS & PJ re: mtg w/ DBD (.2); ph w/ F.Volpe (.1); emails to clients & DE re: possible mtg (.2) | 1.3 |
| 4/26/22 | CT | ph w/ DE re: site visit (.3); texts w/ Volpe & to DE (.1) | 0.4 |
| 5/1/22 | CT | travel to Seattle for site visits @ 25% | 0.6 |
| 5/2/22 | CT | travel to Outlook from Seattle @ 25% | 0.9 |
| 5/2/22 | CT | ph w/ J.Glessner re: settlement mtg (.2); disc w/ DE re: remediation (.4); drive by site (.3) | 0.9 |
| 5/3/22 | CT | prep for settlement mtg (.5); meet w/ DE re: prep for mtg (.5); ph w/ client FOTC re: mtg (.3) | 1.3 |
| 5/4/22 | CT | travel to (.5); & mtg w/ J. Glessner & S. Stephen re: settlement at (2.5); DBD HQ; prep w/ DE (.3) | 3.3 |
| 5/4/22 | CT | travel back to Seattle @25% | 1.0 |
| 5/10/22 | CT | emails w/ client FOTC re: mtgs | 0.2 |
| 5/19/22 | CT | ph w/ DE and then fwd into to J. Glessner | 0.4 |
| 5/23/22 | CT | email to JWG re: no agreement | 0.2 |
| 5/27/22 | CT | ph w/ DE | 0.2 |
| 6/3/22 | CT | review of settlement plan from DBD & fwd to clients w/ memo (.7); email to JWG (.2); ph w/ clients JM at FOTC re: next steps (.3) | 1.2 |
| 6/5/22 | CT | emails w/ J.Glessner | 0.3 |
| 6/6/22 | CT | emails w/JWG &DE | 0.2 |
| 6/7/22 | CT | ph w/ J.Glessner & PJ | 0.3 |
| 6/8/22 | CT | disc w/ PJ re: site issues (.2); confer with DS re:Glessner (.2) | 0.4 |

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| 6/10/22 | CT | ph w/ J.Mendoza re: next steps | 0.2 |
| 6/17/22 | CT | edit CD (1.7) & send to clients w/ memo (.2); ph w/ DE re: CD issues (.3) | 2.2 |
| 6/20/22 | CT | work on CD issues (2.5) and send to JWG w/ note (.2); ph w/ PJ re: same (.2) | 2.7 |
| 6/23/22 | CT | ph w/ PJ & DS re: CD issues & case mngmt (.4); ph w/ DE & PJ re: scope of R1 plan (.2) | 0.6 |
| 6/30/22 | CT | review cost issues for CD (.2); ph w/ PJ re: CD cost issues (.2); review stip & approve by email (.2); edit 7 send RI Remedy proposal (.5); ph w/ M. Weinberg at JWG's request (.2) | 1.3 |
| 7/5/22 | CT | emails about case status | 0.2 |
| 7/6/22 | CT | ph w/ PJ & DS re: next steps | 0.2 |
| 7/8/22 | CT | email & text to JWG re: update | 0.2 |
| 7/11/22 | CT | review response from JWG re: CD (.7); email DE re: times to discuss (.1) | 0.8 |
| 7/12/22 | CT | call w/ DE, PJ (.4); re: CD reply; call w/ BM (.2) | 0.6 |
| 7/13/22 | CT | ph w/ BM re: settlement ideas (.6); ph w/ PJ & DS re: CD concept (.2) | 0.8 |
| 7/14/22 | CT | ph w/ FOTC J. Mendoza re: settlement issues | 0.7 |
| 7/15/22 | CT | ph w/ BM re: agreement in principle | 0.3 |
| 7/18/22 | CT | ph w/ DE re: pilot project concepts & issues (.6); ph w/ PJ re: water rights research re: pilot project (.2) | 0.8 |
| 7/20/22 | CT | texts w/ BM | 0.2 |
| 7/21/22 | CT | review BM proposed CD and fwd to DE w/ short memo (.7); disc w/ DS (.2); ph w/ BM (.2); re: stay & CD | 1.1 |
| 7/22/22 | CT | ph calls w/ L. Fite (.2); re: stay; emails w/ BM re: agreement in principle (.3) | 0.5 |
| 7/25/22 | CT | ph w/ BM, S. Stephen, PJ & DE re: settlement terms & remediation issues (.5); ph w/ PJ re: same (.2); disc w/ DE reL technical issues (.2) | 0.9 |
| 7/26/22 | CT | Emails & ph calls re: stay | 0.3 |
| 7/27/22 | CT | ph w/ BM re: stay stip | 0.2 |
| 7/29/22 | CT | send stip to clients w/ memo (.3); ph w/ client JM at FOTC re: stip approval (.3) | 0.6 |
| 8/12/22 | CT | ph w/ PJ re: CD | 0.2 |
| 8/16/22 | CT | ph w/ D. Erickson re: work plan (.2); ph w/ PJ re: CD (.2) | 0.4 |
| 8/22/22 | CT | ph w/ PJ re: work plan issues (.2); begin editing work plan (.6) | 0.8 |
| 8/23/22 | CT | edit work plan & send comments back to DE | 1.3 |
| 8/26/22 | CT | ph w/ DE re: cost & work plan issues | 0.2 |
| 9/3/22 | CT | email to BM & JWG re: mtg dates | 0.3 |
| 9/18/22 | CT | Review & comment on WET work plan (.5); email to DE re: same(.2) | 0.7 |
| 9/19/22 | CT | work on narrative on oxygenation w/ DE (.8); work (.7); on docs & send to BM & JW; edit CD & send (1.0) | 2.5 |
| 9/20/22 | CT | ph w/ PJ & DE re: workplan (.2); work on RI & workplan (.5) | 0.7 |
| 9/21/22 | CT | write memo to DBD w/ Pilot Narrative & Work Plan edits | 1.5 |
| 9/23/22 | CT | ph w/ DE re: logistics & prep | 0.3 |

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| 9/24/22 | CT | work on 9/27 mtg logistics | 0.2 |
| 9/26/22 | CT | ph w/ FOTC (J. Mendoza) about settlement matters (.5); fwd docs to clients (.2); ph w/ DE re: tomorrow (.2); travel to YKM from SEA (55%= 1.4); mtg w/ DE & JA to discuss settlement (1.0) | 3.3 |
| 9/28/22 | CT | travel back to SEA (3x.55)= 1.7); disc w/ DE & JA re: next steps (.5); ph w/ PJ & DS (.2) | 2.4 |
| 9/29/22 | CT | ph w/ FOTC (J. Mendoza) re: settlement issues & debrief on 9/27 mtg (.7); ph w/ DE re: progress w/ S. Stephen on remediation (.3) | 1.0 |
| 10/14/22 | CT | disc w/ DE (.1); email to BM & SW re: S.Stephen response (.2) | 0.3 |
| 10/21/22 | CT | comm w/ BM re: next steps | 0.2 |
| 10/24/22 | CT | ph w/ L.Fite re: case status | 0.2 |
| 10/25/22 | CT | ph w/ DS re: case status issues | 0.2 |
| 10/26/22 | CT | ph w/ DE re: status of S.Stephen response | 0.6 |
| 10/27/22 | CT | prepare:for filing of joints status, including request for info for JSR (1.5); work on JSR (1.5); memo to clients re: case status (.3); call with DS re:status (.2) | 3.5 |
| 10/28/22 | CT | ph w/ B. Monahan re: settlement issues (.3); emails to counsel re: JSR (.2); ph w/ DS re: JSR & settlement (.2); review RI from WET/Agri (.7); work on revised Status Report (SR)(.8); ph w/ JA & DE from WET, later joined by DS, to discuss RI (.5) | 2.9 |
| 10/31/22 | CT | file status report w/ Judge Rice (.2); ph w/ BM & send courtesy copy of repo A (.2); memo to clients w/ status report (.2) | 0.6 |
| 11/1/22 | CT | review Glessner emails & respond (.2); ph w/ DE re: next steps (.2) | 0.4 |
| 11/2/22 | CT | work on new CD (1.8); review & fwd soil sampling info from JWG (.2) | 2.0 |
| 11/3/22 | CT | work on CD (2.0); memo to clients w/ new draft CD (.4); ph w/ DS | 2.6 |
| 11/4/22 | CT | comm. W/ client FOTC re: mtg about CD (.2); ph w/ DS re:CD (.2) | 0.4 |
| 11/7/22 | CT | mtg w/ FOTC board by Zoom w/ JF (1.1); disc w/ JF re: case next steps (.2) | 1.3 |
| 11/8/22 | CT | ph w/ D.Erickson re: CD | 0.2 |
| 11/10/22 | CT | ph w/ B. Monahan re: settlement | 0.2 |
| 11/11/22 | CT | final edits to draft CD & send w/ memo to BM & JWG | 2.5 |
| 11/14/22 | CT | mtg w/ JF in EUG re: case issues & game plan | 0.5 |
| 11/15/22 | CT | work w/ JF on case issues (1.0); ph w/ DS & JF re: case strategy & game plan (1.0) | 2.0 |
| 11/16/22 | CT | disc case strategy & ltr w/ JF (.2); review ltr for editing (.2); ph w/ DE re: case status (.2) | 0.6 |
| 11/18/22 | CT | review, revise & read ltr to defendants re: discovery | 0.7 |
| 11/21/22 | CT | ph w/ J. Mendoza at FOTC re: settlement issues (.8); memo to clients re: DBD response to offer (.3) | 1.1 |
| 11/22/22 | CT | Draft & send response to B. Monahan's 11/21 emails re: CD | 1.4 |
| 11/28/22 | CT | corresp w/ client FOTC re: pilot project proposals | 0.3 |

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| 12/1/22 | CT | ph w/ G. Baise (.2); send email w/ docs to GB (.2); ph w/ BM re: settlement issues (.6); ph w/ DS & JF re: recent emails (.3); search for, review, & send DBD data on soils to BM at his request (.4) | 1.7 |
| 12/7/22 | CT | work on billing issues | 0.2 |
| 12/8/22 | CT | Review & fwd billing summary to BM for settlement (.3); draft & send reminder to G. Baise for response for scheduling issues (.3); review PTO 7 & fwd to BM (.2); review Baise emails (.1); ph w/ DS re:status (.2) | 1.1 |
| 12/12/22 | CT | respond to GB emails re: scheduling issues (.2); comm w/ BM (.1) | 0.3 |
| 12/13/22 | CT | ph w/ BM re: CD issues (.2); review CD & corresp from BM (.8); fwd docs to internal team (.1) | 1.1 |
| 12/15/22 | CT | ph w/ DE re: CD issues (.3); texts w/ J. Glessner re: call (.1) | 0.4 |
| 12/19/22 | CT | 1pm call to Glessner & JF (.5); prepare:for call by comparing CD issues (1.5) | 2.0 |
| 12/21/22 | CT | email G. Baise re: discovery (.2); read Glessner email & send to DE for review (.2); ph w/ DE (.2); revise & send email to JWG (.3) | 0.9 |
| 12/23/22 | CT | emails w/ DE & JWG re: settlement issues | 0.2 |
| 12/27/22 | CT | ph w/ FOTC (J.Mendoza) re: case status & standing issues (.3); review draft CD for differences in prop for all (.3) | 0.6 |
| 12/28/22 | CT | ph w/ JF before:call (.1); ph w/ DE before:call w/ JWG (.2); ph conf w/ JWG, S. Stephen, DE & JF re: RI issues (.6); ph w/ DE & JF after call to discuss next steps (.3) | 1.2 |
| 1/02/23 | CT | emails to experts re: reports | 0.3 |
| 1/3/23 | CT | Zoom call w/ K. Nachman & JF (.5); ph w/ DS re: case strategy (.2); email to GB & JC re; dep dates for Chavarins & Stephen (.2) | 0.9 |
| 1/04/23 | CT | Zoom call with Dan & Jon re: expert reports, discovery and case strategy (.7); updating & sending dep notary & subpoenas, including reviewing history of discovery, for K&D Chavarin & S. Stephen (3.4); set up call among attys & expert (.1); review email from DE and respond re:Pilot Project | 4.4 |
| 1/5/23 | CT | prep for (.5); call w/ MR re: expert report (.5); disc w/ JF & DS after (.2); email w/ BM re: negotiation status (.1); ph w/ AVS re: case legal needs (.3) | 1.6 |
| 1/6/23 | CT | work on settlement issues/follow up from 12/28 call | 0.6 |
| 1/9/23 | CT | ph w/ DS re: discovery issues | 0.2 |
| 1/10/23 | CT | emails w/ G.Baise re: depositions (.2); review outstanding discovery matters for email requesting to meet & confer & send M&C emails (1.0); work on response to SS & JWG emails to DE (.7); ph w/ J. Carroll re: depositions & other discovery issues (.3) | 2.2 |
| 1/11/23 | CT | ph w/ DS re: depositions and discovery issues (.5); emails w/ JA & DE re: response to Glessner/Stephen (.4); ph w/ JA re: response to JWG (.2); edit discovery email (.2) | 1.3 |

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| 1/12/23 | CT | dep prep call w/ DS & JF (1.0); setup deps with Central (.2); ph w/ DE re: settlement next steps (.3); prep for Chavarin deps (1.5); work on dep scheduling issues (.2); ph w/ DE re: settlement issues (.3) | 3.5 |
| 1/13/23 | CT | ph w/ DS re: M&C (.2); M&C w/ JC,GB,DS, JF & CT (.8); ph w/ DS after (.2); ph w/ JF re: dep prep (.2); doc review for K.Chavarin dep (.8) | 2.2 |
| 1/15/23 | CT | ph w/ JF re: Chavarin dep outlines | 0.2 |
| 1/16/23 | CT | prep for Chavarin deps | 2.3 |
| 1/17/23 | CT | follow up call w/ expert K.N & JF (.6); ph w/ JF re: dep prep (.2); review docs for KC dep (2.7); and work on outline (.7); more:dep prep (.8) | 5.0 |
| 1/18/23 | CT | prep for dep (1.0); Dep of K.Chavarin 9am-11:24 (2.4); call w/ JF & DS after dep (.3); review docs just served (1.3) | 5.0 |
| 1/19/23 | CT | attend depo of D.Chavarin (1.8); disc w/ JF&DS after (.3); review 30(b)(6) to DeCoster defendants (.2); ph w/ Jess A. re: settlement & review his draft (.5) | 2.8 |
| 1/20/23 | CT | ph w/ DS re:SS dep & other discovery (.3); ph w/ JF re: expert reports (.3) | 0.6 |
| 1/23/23 | CT | dep of S. Stephen by DS; provide research for questioning during the dep & on breaks | 7.3 |
| 1/25/23 | CT | ph w/ JA re: settlement issues | 0.2 |
| 1/30/23 | CT | ph w/ JF & Kieve N. re: expert report (.7); ph w/ JF after call w/ KN (.2); ph w/ JA re: settlement issues (.2); ph w/ BM re: settlement status (.2) | 1.3 |
| 1/31/23 | CT | ph w/ DS re: rep.agreement (.3); ph w/ J.Mendoza re: PJ/DS rep.agreement (.2); emails re: discovery issues (.2) | 0.7 |
| 2/1/23 | CT | ph w/ DS re: discovery (.2); ph w/ JF re: discovery (.2); emails re: motion to compel w/ Judge Rice (.2) | 0.6 |
| 2/2/23 | CT | Edit & read email to JWG/BM re: settlement (.5); ph w/ JF re: Nachman report (.2); ph w/ DS re: experts & discovery (.2) | 0.9 |
| 2/6/23 | CT | call w/ DS re: discovery & experts (.2); edit new counsel agreement & send to DS (.3); emails w/ BM re: settlement (.2); work on Nachman report edits (1.7) | 2.4 |
| 2/8/23 | CT | ph w/ JF w/ expert issues (.2); finish edits to Nachman expert report (1.3) | 1.5 |
| 2/9/23 | CT | ph w/ DS re: ltr to Ct. re: discovery problems (.2); ph w/ JF re: expert reports (.2) | 0.4 |
| 2/13/23 | CT | ph w/ DS re: hrg matters (.2); emails to JWG re: settlement (.2); ph w/ expert KN & JF re: expert report (.6); read corresp from DS (.3) | 1.3 |
| 2/14/23 | CT | ph w/ BM re: settlement issues | 0.2 |
| 2/15/23 | CT | prep for (.2); and call w/ Judge Rice & call counsel re: JT discovery motion (.6); ph w/ DS after (.2); ph w/ DE re: expert rept (.2); ph w/ JF re: experts | 1.4 |
| 2/17/23 | CT | prep for call w/ J. Glessner (.3); call w/ JWG, SS, JF, DE & JA re: settlement issues (.6); ph w/ DE after settlement call (.2); ph w/ DS re:discovery (.1); ph w/ J. Mendoza & DS re: case issues & settlement (.6) | 1.8 |
| 2/20/23 | CT | work on Nachman and Erickson expert reports (1.7); review & edit settlement w/ WET (.3) | 2.0 |

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| 2/21/23 | CT | ph w/ JF re: expert reports (.3); work on Nachman report (.3); ph w/ DS re: discovery & expert report issues (.2); edit & send settlement to JWG (.3) | 1.1 |
| 2/22/23 | CT | ph w/ DS re: expert report timing (.1); ph w/ JF re: Nachman report (.1); work on Nachman report (1.5); email to all counsel re: expert report timing (.2); email to JF & DS re: expert extension (.2); review emails re: representation (.1); ph w/ DE re: expert report (.3) | 2.5 |
| 2/23/23 | CT | review joint motion for ext (.3); ph w/ DS re: same(.2) | 0.5 |
| 2/24/23 | CT | send edited RI decision history to BM (.2); ph w/ D. Reddout re: case issues, settlement, discovery (.2) | 0.4 |
| 2/27/23 | CT | ph w/ JF re: expert reports (.2); ph w/ DE re: expert report (.2) | 0.4 |
| 2/28/23 | CT | email to client JM re: cost contributions (.2); edit Erickson expert reports (2.5) | 2.7 |
| 3/1/23 | CT | review K. Chavarin dep correction sheets | 0.2 |
| 3/2/23 | CT | ph w/ DS & edit M.Russelle expert report | 1.7 |
| 3/3/23 | CT | mtg w/ DE, JF & DS re: expert report (1.0); work on expert report (.7) | 1.7 |
| 3/5/23 | CT | work on expert report (CDWP & Wassemiller parts) (1.5); disc w/ JF re: same (.2) | 1.7 |
| 3/8/23 | CT | comms w/ JWG & BM re: settlement (.2); ph w/ DE re: expert report (.2); ph w/ BM re: settlement issues (.2) | 0.6 |
| 3/9/23 | CT | ph w/ DS re: M. Russelle expert report (.2); final edit of Ruselle report (2.5); work on Erickson report (1.7) | 4.4 |
| 3/10/23 | CT | work on finalizing all 3 expert reports (1.5); initial review of defendant's expert reports (.8); ph w/ JF re: Erickson report issue (.2) | 2.5 |
| 3/13/23 | CT | review defendants expert reports in more:depth (1.2); ph w/ DS & JF re: multiple case issues – disc; MSJ, experts, etc (.7); edit MTC (.5); | 2.4 |
| 3/14/23 | CT | ph w/ DS re: MTC & other discovery matters (.3); finalizing MTC & supporting exhibits (.4); ph w/ J.A at WET re: settlement issues (.2) | 0.9 |
| 3/15/23 | CT | ph w/ JF re: expert docs | 0.2 |
| 3/16/23 | CT | edit resps & other related discovery & disc w/ DS (.5); review WET info on RI costs (.3); ph w/ DS re: disco (.2); ph w/ DE re: settlement response (.2); edit & send settlement resp to JWG (.6); emails w/ client JM re: depositions (.2) | 2.0 |
| 3/17/23 | CT | ph w/ JF re: discovery issues | 0.2 |
| 3/18/23 | CT | work on standee information | 0.3 |
| 3/20/23 | CT | review M. Russelle comments on Fasching report (.2); Ph w/ R. Wassemiller re: depo issues (.2); review emails w/ Court re: MTC (.1); review defendants response to MTE (.1); ph w. DS re: case tasks (.4); legal research for MSJ – injunctive relief (.4) | 1.4 |
| 3/21/23 | CT | ph w/ B.M. Re: settlement ideas (.3); ph w/ DS re: disc issues (.2); emails re: mtg & Mot for more:depositions (.2) | 0.7 |

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| 3/22/23 | CT | call w/ counsel J.Carroll & G.Baise re: 408 settlement possibilities (.5); ph w/ DS re: result of call w/ JC & GB (.2) | 0.7 |
| 3/23/23 | CT | emails re: dep scheduling w/ co-counsel | 0.3 |
| 3/24/23 | CT | ph w/ J.Marshall re: trial prep assistance (.3); emails w/ DS & JF re: dep scheduling (.1); work on discovery/sub to Farallon (.3); ph w/ JF re: expert deps (.2); review Hicks' expert report in prep for dep (1.2) | 2.1 |
| 3/25/23 | CT | read defendants response on MTC & sanctions and decl by JC in support (.4); ph w/ DS re: reply (.2); review recent GW & soil data & fwd to DE (.4) | 1.0 |
| 3/27/23 | CT | ph w/ JF re: reply (.2); review notices re: Glessner ph & computer for reply (1.3); on sanctions | 1.5 |
| 3/28/23 | CT | edit motion for sanctions & send back to DS & JF | 1.2 |
| 3/29/23 | CT | review history of emails spoliation/Glessner (.7); ph w/ DS re: spoliation reply (.3); ph w/ JF re: my reply decl & spoliation (.2); review Glessner & DeCoster transcripts re: working for DeCoster Ent (1.2); final edits to reply & declaration (1.5); fwd complaint to D.Cook and then client reps (.4) | 4.3 |
| 3/30/23 | CT | call w/ Glessner & WET (.4); re: remediation issues; ph w/ DE after call w/ DBD (.3); ph w/ BM re: settlement possibilities (.2) | 0.9 |
| 3/31/23 | CT | review emails re: Glessner doc disclosure:(.2); ph w/ DE re: talking to Glessner (.2) | 0.4 |
| 4/3/23 | CT | ph w/ DE re: his call w/ JWG & SS (.2); ph w/ B.Chandler re: Daubert motions; ph w/ DS re: Daubert & deps (.2); view & fwd GW mon.map sent by DBD on 3/30 (.2); ph w/ DS re: Glessner doc production (.2); ph w/ JF re: deps & docs (.2); draft & send depo dates to defendant's (.6) | 1.6 |
| 4/4/23 | CT | ph w/ DS (.2); & email to counsel re: Glessner de issues (.3); read Ct.order on extra depositions & fwd (.1); to BM; works on Hicks rebuttal (.2); review Hicks report for dep prep (.4) | 1.2 |
| 4/5/23 | CT | ph w/ DS re: deps, JWG discovery, & related (.2); review JWG docs in prep for dep (1.7) | 1.9 |
| 4/6/23 | CT | ph w/ DS re: depo scheduling (.2); review depo comms w/ defendant (.3) | 0.5 |
| 4/7/23 | CT | ph w/ JF re: discovery matters | 0.2 |
| 4/10/23 | CT | ph w/ DS & JF re: depo scheduling & related discovery matters (.5); ph w/ JF re: deps (.1); ph w/ RW re: dep (.2); ph w/JM re: dep (.2); email to counsel w/ dep sched (.2) | 1.2 |
| 4/11/23 | CT | Meet & confer w/ J.Carroll, DS & JF re: multiple discovery problems (1.5); ph w/ DS after (.1); review Russelle rebuttal (1.0); Erickson rebuttal work (.2); initial review of Glessner emails & draft CD (.5) | 3.3 |

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| 4/12/23 | CT | ph w/ C.Wassemiller re: dep set up for RW (.3); ph w/ DS re: dep issues (.2); ph w/ JF re: Erickson report & deps (.2); edit Hicks rebuttal by DE and return to him (1.0); finish & send email to J.Carroll re: yesterday's M&C (.7); ph w/ DE re: Hicks & Russelle rebuttals (.2); dep prep scheduling (.2); memo to clients w/ Glessner CD draft (.3); email to JWG re: possible mtg (.2) | 3.3 |
| 4/13/23 | CT | prep K.Nachman by Zoom w/ JF (1.4); email to counsel re: Cliff Gibbs (.3); edit email to counsel re: discovery M&C request (.3); Zoom prep w/ JF & J.Mendoza (1.5); email to Central re: deps (.2); work on draft CD (1.3); work on DE expert report (.5) | 6.5 |
| 4/14/23 | CT | Rosemary W. dep prep w/ JF by Zoom (1.7); ph w/ JF re: rebuttals & dep issues (.3); work on settlement (.7); email to J.Mendoza re: dep prep (.2) | 2.9 |
| 4/15/23 | CT | review Glessner subpoena & send edits to JF | 0.4 |
| 4/17/23 | CT | work on dep sched issues (.2); ph w/ DS re: MTC (DG&CG)(.2); ph w/ JF re: supp rogs (.1); ph w/ DE re: CD issues (.7); work on CD edits & send to JWG (5.0); settlement strat disc w/ AR (.3) | 6.5 |
| 4/18/23 | CT | defend dep of J.Mendoza taken by Jay Carroll (1.4); ph w/ J.Mendoza & JF after dep & AVS (.4); ph w/ DS re: ongoing case issues (.2); attend dep of R.Wassemiller (1.3); prep for mtg w/ JWG (.5); settlement mtg in person w/ JWG (2.0); work on CD per settlement (2.5); & memo & JWG ph w/ DS, JF & then DE re: settlement (.4); email w/ memo to clients (.5); | 9.2 |
| 4/19/23 | CT | emails w/ JWG re: settlement (.3); ph w/ JF re: Cd (.2); ph w/ DS re: CD issues (.2); ph w/ J.M at FOTC re: settlement (.5); work on CD for call w/ JWG (2.2); ph w/ JWG & SS (.4); finalize & send CD to JWG, SS & JC (.3); call w/ DE re: CD changes (.2); more:work on CD & emails w/ JWG (1.0) | 5.3 |
| 4/20/23 | CT | ph w/ expert K.Nachman to get bills & half work (.2); email to M.Russelle re: invoice & settlement (.2); email to AVS re: fees & settlement (.2); work on CD issues (.4) | 1.0 |
| 4/21/23 | CT | next to final review & edit of CD & exhibit list (1.5); emails to JF w/ instructions (.2); ph w/ DS re: CD execution (.1) | 1.8 |
| 4/24/23 | CT | FOTC exec session re: settlement 9.7); work on CD & call JF re: same (.3); emails w/ FOTC re: CD approval (.2); ph w/ JF re: CD & exhibits (.3); ph w/ H. Reddout re: CD (.3) | 1.8 |
| 4/25/23 | CT | work on Exhibits & details of CD (.5); ph w/ DE re: CD issues & exhibits (.2); email w/ team re: CD requirements (.2); email w/ G Baise re: address (.1); email to all parties w/ final CD (.7); email to clients final review, signature:(.2) | 2.0 |
| 4/26/23 | CT | ph w/ JF (.4); re: CD exhibits (.3); work on CD exhibits (.5) | 1.2 |
| 4/27/23 | CT | work on exhibits (.4); ph w/ JF re: exhibits (.2) | 0.6 |
| 4/28/23 | CT | ph w/ (JM) FOTC re: CD (.2); travel to/from Sunnyside for mtg w/ CAre:to discuss CD (6.0); mtg w/ CAre:(HR & DR) re: CD issues (2.0); drive by & take pictures of DBD/SMD (.5) | 8.7 |

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| 5/1/23 | CT | ph w/ JF re: exhibits remaining (.3); & email to M. Russelle re: moisture:sensors (.2); read order on sanctions & disc w/ AR (.3) | 0.8 |
| 5/2/23 | CT | work on CD exhibits (.2); ph w/ JF re: exhibits for CD (.4); ph w/ M.Russelle re: expert issues & bill (.3) | 0.9 |
| 5/4/23 | CT | corresp re: exhibits for CD | 0.2 |
| 5/5/23 | CT | work on exhibits on moisture:sensor & disc w/ JF (.3); ph w/ JF re: field sensor exhibits (.2) | 0.5 |
| 5/8/23 | CT | ph w/ JF re:Ex. 6 issues | 0.2 |
| 5/9/23 | CT | work on Ex 6 and emails from JWG | 0.2 |
| 5/10/23 | CT | ph w/JF re:exhs and review emails re:exhs | 0.2 |
| 5/11/23 | CT | ph w/ JF re:CD exhs issues | 0.2 |
| 5/12/23 | CT | ph w/ DS re:CD issues (.2); ph w/ JF re:CD issues (.2) | 0.4 |
| 5/15/23 | CT | draft notice of settlement and email to D's re:same | 0.6 |
| 5/16/23 | CT | ph w/ JF re:CD issues (.2); ph w/ MT re:fee calcs (.1); edit response to JWG re:CD language (.7); review Russelle billing (.2) | 1.2 |
| 5/17/23 | CT | work on fee issues of co-counsel and experts (.3); ph with DE re:RI CD issues (.2) | 0.5 |
| 5/18/23 | CT | ph w/ JF re:CD issues (.2); ph w/ J. Alexander re:CD issues (.2) | 0.4 |
| 5/19/23 | CT | edit and send emails to JWG re:CD edits | 0.4 |
| 5/22/23 | CT | emails re:CD and notice of settlement | 0.3 |
| 5/23/23 | CT | trying to move CD along (.2) | 0.2 |
| 5/26/23 | CT | check on CD progress and call to JWG | 0.2 |
| 5/30/23 | CT | ph w/ JF re:CD issues (.2); review JWG email and consider (.2); email w/ DE re:CD issues (.2) | 0.6 |
| 5/31/23 | CT | ph w/ DE re: JWG CD comments (.2) | 0.2 |
| 6/1/23 | CT | emails w/ JWG and ph w/JF re:CD issues (.2) | 0.2 |
| 6/2/23 | CT | review CD comments and prep for call w/ JWG (1.0); call w/ JWG, JF and DE re:CD and EX language (.7); ph w/ JF and DE after call w/ JWG re:CD language (.3) | 2.0 |
| 6/5/23 | CT | review final CD and exhs (1.0); and fwd w/ email to JWG (.2) | 1.2 |
| 6/6/23 | CT | emails w/ JWG re:CD (.2); ph w/JF re:CD (.2); email to clients re:CD finalization and memo re:same (.5); ph w/ FOTC- JM- re:CD finalization (.5) | 1.4 |
| 6/7/23 | CT | email to JWG re:signatures and call w/ JF and DE re:Ex. 2 changes | 0.2 |
| 6/8/23 | CT | emails re:CD status (0.3); emails re: Joint Mtn to enter CD and edit same (.2) | 0.5 |
| 6/9/23 | CT | organize filing of CD (.6); ph w/ J Carroll re:JME (.2); ph w/ JF re:filing CD (.2); memo to clients w/ final CD (.2) | 1.2 |
| 6/12/23 | CT | work on documents & review | 0.40 |
| 6/15/23 | CT | ph w/ DS re: fee issues | 0.20 |
| 6/16/23 | CT | ph w/ court & then JF re: proposed order on CD (.3); & send to ct. | 0.30 |

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| 6/20/23 | CT | ph w/ DE, JA & JF re:coordinating CD deadline requirements (.5); ph w/ JF re: fee review (.2) | 0.70 |
| 6/22/23 | CT | edit fee sheets | 0.50 |
| 6/23/23 | CT | work on fee request | 0.20 |
| 6/24/23 | CT | memo for JWG on payments due | 0.40 |
| 6/25/23 | CT | fee doc review | 0.50 |
| 6/26/23 | CT | fwd fee docs w/ memos to JWG | 0.30 |
| 8/15/23 | CT | read defendant's denial of fees & send memo to co-counsel for fee petition | 0.30 |
| 8/17/23 | CT | emails w/ JF re: fee petition issues (.2); ph w/ DE re: RI issues (.2) | 0.40 |
| 8/18/23 | CT | email to PK re: fee petition declaration (.3); work on CT declaration for fees (1.0); ph w/ PK (.2) | 1.50 |
| 8/21/23 | CT | ph w/ P Kampaeier re: decl for fee petition (.5); find & send CP decision (.2); ph w/ JF re: fee petition (.2); ph w/ DS re: fee petition (.2); work on my declaration (1.0) | 2.10 |
| 8/22/23 | CT | work on my decl in support of fees | 1.70 |
| 8/24/23 | CT | review case history for my fee decl & work on decl. | 2.20 |
| 8/27/23 | CT | read record to aid in my decl. | 1.50 |
| 8/29/23 | CT | ph w/ B. Chandler re: fee pet.decl. & email re: same | 0.30 |
| 8/31/23 | CT | work on case study for my declaration | 2.40 |
| 9/1/23 | CT | ph w/ P. Kampmeier re: fee petition (.2); ph w/ DS re: fee petition & subpoenas (.4); review subpoenas (.3) | 0.90 |
| 9/3/23 | CT | ph w/ client JM re: fee declaration issues | 0.60 |
| 9/4/23 | CT | work on my fee decl. (1.8); email to J. Mendoza re: decl. (.2) | 2.00 |
| 9/5/23 | CT | work on fee brief (.3); emails to P.Kampmeier re: decl issues (.2) | 0.50 |
| 9/7/23 | CT | ph w/ DS re: fee petition (.2); ph w/ JF re: brief & decls (.2); edit JM decls. (1.0) | 1.40 |
| 9/8/23 | CT | edit TM dec & memo to team (.6); edit AVS dec & memo to CFS re: same (.6); edit brief in support (2.2); ph w/ JF re fee issues (.2) | 3.60 |
| 9/10/23 | CT | work on CT declaration | 2.20 |

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| Date | Atty | LOCMT fees | Time |
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| 1/11/19 | DS | Rev public records for DBD, Inc. | 5.4 |
| 1/14/19 | DS | Cont file review for DBD, Inc. Begin work on NOI (1.5) | 6.8 |
| 1/16/19 | DS | Cont. file review | 1.4 |
| 1/28/19 | DS | Prep for and hold call with client re: upcoming cases | 1.2 |
| 1/28/19 | DS | Public records rev. for NOI | 1.4 |
| 1/31/19 | DS | Public records rev. for NOI | 4.9 |
| 2/1/19 | DS | Work on NOI | 3.2 |
| 2/4/19 | DS | Update NOI with new info from Ars | 1.9 |
| 2/6/19 | DS | Public records rev. for NOI | 2.1 |
| 2/11/19 | DS | Research re: solid waste exemption for PS discharges in def of solid waste | 3.5 |
| 2/11/19 | DS | Final review of DBD NOI | 1.0 |
| 2/11/19 | DS | Emails with cocounsel re: NOI timing | 0.4 |
| 2/25/19 | DS | Phone call with PJ re: NOIs and involvement | 0.5 |
| 5/22/19 | DS | Rev record (.5); rev and edit complaint while referencing record (3.3) | 3.8 |
| 5/23/19 | DS | Final review on all documents before filing | 5.5 |
| 6/2/19 | DS | Think about legal aspects of case: discovery, complaint, anti-duplication, permit shield | 2.9 |
| 7/9/19 | DS | Rev. new public records | 1.9 |
| 8/8/19 | DS | Rev MTD (.9); begin research and drafting opposition | 5.4 |
| 8/19/19 | DS | Rev. HR decl. and provide edits/comments | 0.9 |
| 8/19/19 | DS | Cont. work on opposition to MTD | 2.5 |
| 8/20/19 | DS | Cont. work on opposition to MTD: drafting, research re: exclusion for PS and EPA guidance (1.6) | 3.4 |
| 8/21/19 | DS | Cont. work on opposition to MTD: drafting, research re: group pleading (.5) | 2.2 |
| 8/22/19 | DS | Draft and finalize Tebbutt Decl. | 1.1 |
| 9/10/19 | DS | Read and consider Defs' reply (.5); review cases (.8) | 1.3 |
| 9/10/19 | DS | Research re: motion to strike (1.3); draft MTS (.8) | 2.1 |
| 9/10/19 | DS | Read and consider Defs' Settlement Proposal | 1.0 |
| 9/18/19 | DS | Discuss settlement issues with team and strategy moving forward | 0.8 |
| 9/24/19 | DS | Read MTS opp and consider (.6); research and read D's cases (1.2); draft opposition (.8); confer with cocounsel re: same (.3). Read updated docs re: application materials (.6) | 3.5 |
| 9/25/19 | DS | Rev edits on MTS reply; confer by e-mail re:same | 0.5 |
| 9/26/19 | DS | Confer with cocounsel re: MTS reply, make changes | 0.3 |
| 1/22/20 | DS | Phone call with J. Suko | 0.3 |
| 1/22/20 | DS | Begin Rev. of 26a1 docs for production | 1.2 |
| 1/23/20 | DS | Finish rev of 26a1 docs (3.5), add all other discovery to folder for production (.2), rev 26a1 disclosure; and edit (.4) | 4.1 |
| 1/23/20 | DS | Rev public records re: last request (.1); send emails to clients re: records request (.3); send request (.1) | 0.5 |

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| 1/24/20 | DS | Confer with PJ x4 re: R26a1 disclosures | 0.9 |
| 1/27/20 | DS | Rev Defs' r26a1 production (.4); rev PARIS database (.4); rev status report and scheduling order (.3); draft R37 letter (1.2) | 2.4 |
| 1/27/20 | DS | Confer with CT re: next legal steps and strategy | 0.3 |
| 1/28/20 | DS | Rev public records re: lagoon construction info | 1.2 |
| 1/28/20 | DS | Rev. initial discovery requests, edit and consider | 2.4 |
| 1/30/20 | DS | Legal strategy session with cocounsel; notes to file | 0.7 |
| 2/6/20 | DS | Rev. DBD revised production, comparing against R26 disclosure agreement | 2.7 |
| 2/7/20 | DS | Rev, edit, and consider second R37 letter re: R26a1's | 1.2 |
| 2/18/20 | DS | Rev. corres re: 26a1 and consider | 0.5 |
| 2/19/20 | DS | Rev. newest 26a1 prod and compare against prior disclosures and agreement | 1.4 |
| 2/21/20 | DS | Rev. confidentiality agreement and consider (.5); send e-mail to cocounsel re: thoughts | 0.7 |
| 3/23/20 | DS | Call with CT and PJ re: case update and strategy moving forward (.5); research re: angles and theories on Defendants' other entities (3.0) | 3.5 |
| 3/24/20 | DS | Draft and research 2nd Prot. Supp. NOI; call re: same with counsel x3 | 2.7 |
| 3/26/20 | DS | Rev edits and comments on sec. NOI, rev record to verify edits (.8); draft email to cocounsel re: same (.4) | 1.2 |
| 3/30/20 | DS | Call with clients to discuss next steps in litigation | 0.7 |
| 4/1/20 | DS | Debrief with cocounsel about mediation and next steps | 0.5 |
| 4/28/20 | DS | Read emails re: emergency order and CT's email to governor; consider | 0.4 |
| 5/1/20 | DS | Call w/ CT and PJ re: Rule 34 | 0.2 |
| 5/5/20 | DS | Edit and revise letter to Court re: Rule 34 dispute | 0.4 |
| 5/6/20 | DS | Call with CT/PJ (.4); rev CT reply (.3); rev D's letter to Rice (.2) | 0.9 |
| 5/7/20 | DS | Call with Judge Rice, CT, PJ on R34 inspection call and next steps | 0.5 |
| 5/8/20 | DS | Rev site access agreement and send comments to cocounsel | 0.9 |
| 5/11/20 | DS | Call with CT, PJ re: site access agreement issues | 0.3 |
| 5/13/20 | DS | Rev. edited site access agreement | 0.3 |
| 5/19/20 | DS | Emails re: obtaining DBD discovery (.3); initial disco review (2.2) | 2.5 |
| 5/21/20 | DS | Cont. disco review | 1.2 |
| 5/22/20 | DS | Cont. disco review | 1.8 |
| 5/28/20 | DS | Conf. call with CT and PJ re: legal strategy (0.7); call with CT re: discovery (0.2); Rev. disco written response, send CT/PJ notes re: rule 37 letter (1.2) | 2.1 |
| 6/3/20 | DS | Call with CT, PJ | 0.2 |
| 6/22/20 | DS | Rev. newest discovery response from D's and consider | 0.8 |
| 6/23/20 | DS | Cont. discovery review | 1.8 |
| 6/24/20 | DS | Cont. discovery review | 3.2 |
| 6/26/20 | DS | Cont. discovery review (2.3); Confer with PJ, CT x4 re: settlement negotiations (0.5) | 2.8 |

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| 8/11/20 | DS | Careful review of CD, edits/comments; refer to exhibits and agreement while editing | 2.1 |
| 9/4/20 | DS | Rev. DBD corres re: response to CD | 0.7 |
| 9/9/20 | DS | Rev sampling plan for lagoon abandonment | 0.2 |
| 9/17/20 | DS | Rev our response to DBD 9/4 letter, consider | 0.4 |
| 9/21/20 | DS | Rev emails re: letters to J. Suko and procedure | 0.2 |
| 9/22/20 | DS | Rev emails and consider re: abandonment and labs acceptable for use; confer with cocounsel re:same | 0.3 |
| 9/23/20 | DS | Rev our in camera letter and consider | 0.3 |
| 9/24/20 | DS | Phone calls with PJ and CT x3 re: update on mediation | 1.2 |
| 9/29/20 | DS | Rev JH email re: abandonment and sampling | 0.2 |
| 10/12/20 | DS | Confer with CT, PJ (.4); research re: ISE Broadway LLC (1.1) | 1.5 |
| 10/13/20 | DS | Call with CT, PJ re: case management and tasks (.8); Rev. corres and past disco, update notes to file (2.4); write memo re: outstanding litigation issues (1.4) | 4.6 |
| 10/14/20 | DS | Call with PJ re: LLC entities and connections (.5); Rev PO (.6); rev docs Parker ref'd re: land ownership (.9); edit litigation memo (.4); phone call with CT, PJ re: hearing and update (.6) | 2.9 |
| 10/20/20 | DS | Rev FAC and edit | 1.0 |
| 10/21/20 | DS | Call with PJ re: disco and next steps | 0.5 |
| 10/23/20 | DS | Call with CT and PJ re: case update and next steps (.4); Rev. subpoenas, rev and edit exhibit and attachments re: doc production, rev depo notices (.8); Draft email for CT consideration re: disco (.3); Rev and consider Odell's most recent emails and case developments (.6); Rev Odell's third email and confer with team (.5) | 2.6 |
| 10/26/20 | DS | Status call with CT | 0.2 |
| 10/27/20 | DS | Prep for R 37 conference (.9); prep with CT for and hold conference (but didn't reach R37 matters) (1.3); f/u with team (0.2); Rev and consider our discovery needs for rest of case to trial (1.2) | 3.6 |
| 10/28/20 | DS | Prep for and hold R37 conference, notes to file, f/u with cocounsel | 2.1 |
| 10/29/20 | DS | Re-write letter re: outstanding disco disputes (1.2); call with CT and PJ (0.2) | 1.4 |
| 11/3/20 | DS | Call with cocounsel re: next steps and case mgt | 0.4 |
| 11/3/20 | DS | Consider and draft initial Glessner deposition outline | 2.9 |
| 11/3/20 | DS | Review discovery | 2.5 |
| 11/4/20 | DS | Rev updates to confidentiality order (.4); draft letter to J. Rice re: discovery dispute (1.0); call with CT and PJ (.3) | 1.7 |
| 11/5/20 | DS | Rev and edit letter to Judge Rice | 0.4 |
| 11/5/20 | DS | Rev letter from Odell to Court | 0.3 |
| 11/6/20 | DS | Discovery review (1.5); prep for and hold conference with Court re: disco disputes (.7); f/u with counsel and plan next steps (.5) | 2.7 |
| 11/8/20 | DS | Rev former discovery and write memo re: unduly burdensome objections | 0.8 |

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| 11/9/20 | DS | Call with CT and PJ (.2) | 0.2 |
| 11/11/20 | DS | Prep for and hold conference; call with CT and PJ (.2) | 1.2 |
| 11/12/20 | DS | Rev and edit discovery letter to Odell | 0.4 |
| 11/23/20 | DS | Call with CT/PJ re: DBD litigation strategy | 0.5 |
| 11/23/20 | DS | Rev recently produced discovery | 1.2 |
| 11/30/20 | DS | Call with CT re: depo | 0.2 |
| 12/1/20 | DS | Rev and consider discovery letter re: continued failures | 0.4 |
| 12/4/20 | DS | Prep for and participate in deposition of Glessner | 6.5 |
| 12/7/20 | DS | Prep for and participate in deposition of Cummings | 4.5 |
| 12/11/20 | DS | Rev and consider Supp NOI re: DeCoster | 0.7 |
| 12/15/20 | DS | Call with CT re: status | 0.2 |
| 12/16/20 | DS | Call with CT and PJ re: discovery | 0.3 |
| 12/22/20 | DS | Rev depo transcripts (1.4); legal research re: spoliation (1.2); call with CT re: same (.2); draft letter re: same to defs (.9) | 3.7 |
| 1/5/21 | DS | Call with CT/PJ re: case assignments (.8); rev depo trans (.5); send email to Odell re: new docs (.3); confer with DE re: expert reports (.2) | 1.8 |
| 1/6/21 | DS | Rev depo notice for Stephens, confer with PJ re: same; call with CT re: discovery (.2) | 0.5 |
| 1/7/21 | DS | Rev new discovery and letter from Odell, consider; call with CT and PJ (.4) | 0.9 |
| 1/8/21 | DS | Rev subpoena & docs from Genny DeRuyter | 0.3 |
| 1/11/21 | DS | Work on motion to amend re: FAC (3.5); call with PJ and CT re: same (.7) | 4.2 |
| 1/12/21 | DS | Call w/ CT and PJ re: discovery | 0.5 |
| 1/13/21 | DS | Write email to Odell re: f/u on spoliation & disco issues | 0.3 |
| 1/13/21 | DS | Prep for and hold conference with Court re: deadlines, f/u with team | 1.0 |
| 1/15/21 | DS | Edit Rule 30b6 letter | 0.3 |
| 1/20/21 | DS | Prep for and hold call with opposing counsel (1.2); f/u with team (4.); draft emails re: commitments made by D's (.4) | 2.0 |
| 1/22/21 | DS | Rev and prepare docs for DeRuyter depo; call with CT (.2) | 1.7 |
| 1/26/21 | DS | Rev Cummings transcript for CT & Genny DeRuyter | 0.4 |
| 1/27/21 | DS | Assist CT in prep of Genny DeRuyter Deposition (1.4); hold and participate in deposition, f/u with team | 3.5 |
| 1/28/21 | DS | Rev and consider Odell letter (.3); call with CT re: same (.3) | 0.6 |
| 2/1/21 | DS | Rev and consider First Supplemental Rule 26a1 disclosures | 0.6 |
| 2/1/21 | DS | Rev new discovery and compare against what has been produced by DeRuyter and public records | 1.2 |
| 2/1/21 | DS | Rev privilege log and consider new additions | 0.4 |
| 2/2/21 | DS | Legal research re: spoliation and sanctions (3.5); begin work on motion for sanctions (3); call with CT (.2) | 6.7 |
| 2/3/21 | DS | Rev search terms and consider, draft alternatives (1.3); draft email re: same and other outstanding litigation issues (.5); rev D's disco answers and consider relevancy objection, research re: same (1); call with CT (.6) | 3.4 |

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| 2/4/21 | DS | Call with CT and PJ | 0.2 |
| 2/9/21 | DS | Rev email from Odell and proposed search terms, consider and respond | 0.5 |
| 2/9/21 | DS | Rev newest rogs/rfps and consider; edit and add new ones | 1.1 |
| 2/10/21 | DS | Rev errata changes for Glessner (.4); research re: sham modifications and Rule 30(e) in Ninth Circuit (1.1); call with CT and PJ (.4) | 1.9 |
| 2/10/21 | DS | Prep for and participate in MN re: litigation and disco issues; f/u with team | 1.8 |
| 2/10/21 | DS | Rev discovery production (1.3); research re: PI and TRO re: SMD lagoons 2 and 3 new pivot | 2.5 |
| 2/11/21 | DS | Rev notes, rev search terms, rev and edit f/u letter w/ eye toward disco docs; call with CT and PJ (.1) | 1.1 |
| 2/11/21 | DS | Revise second RFPs & RFAs | 0.8 |
| 2/11/21 | DS | Rev and edit revised litigation letter | 0.2 |
| 2/12/21 | DS | Draft disco dispute resolution letter (2.2); research re: relevancy and RCRA measure of control (.8) | 3.0 |
| 2/12/21 | DS | Rev. newest search terms, edit, discuss with CT (.6); send email re: same to Odell (.3); rev prior doc production for OCR, rev status expert re: same (.6); draft part of email re: same (.2). Phone call with PJ/CT re: strategy for case (.4). Rev email from Odell to Court re: conference and send email re: same (.3) | 2.3 |
| 2/12/21 | DS | Legal research re: compliance with SDT and subpoena | 1.0 |
| 2/18/21 | DS | Rev and consider edits to dispute resolution letter | 0.5 |
| 2/18/21 | DS | Legal strategy call | 0.2 |
| 2/22/21 | DS | Rev and consider D's discovery dispute paper, research cases re: same | 1.7 |
| 2/23/21 | DS | Rev and edit position paper re: discovery dispute | 0.5 |
| 2/23/21 | DS | Rev D's reply re: relevance dispute | 0.3 |
| 2/23/21 | DS | Rev past corres (.2); rev newest privilege log (.2); compare against newest disco (.2); draft email to Odell re: same (.4) | 1.0 |
| 2/24/21 | DS | Prep for and hold conference with court, f/u with cocounsel re: disco dispute | 0.8 |
| 2/24/21 | DS | Rev. SDT and attachments | 0.3 |
| 2/25/21 | DS | Call with CT | 0.2 |
| 2/26/21 | DS | Rev and prepare discovery for experts | 2.0 |
| 3/4/21 | DS | Call with opposing counsel & f/u with team re: upcoming case deadlines and next steps | 0.9 |
| 3/5/21 | DS | Call with CT and PJ re:discovery (.3) | 0.3 |
| 3/9/21 | DS | Rev and consider disco requests from Defendants | 0.8 |
| 3/10/21 | DS | Rev newest privilege log against docs | 0.4 |
| 3/10/21 | DS | Confer with CT on disco requests | 0.3 |
| 3/10/21 | DS | Call with opposing counsel on disco, f/u with team | 0.8 |
| 3/11/21 | DS | Call with CT and PJ | 0.2 |
| 3/18/21 | DS | Call with opposing counsel again, f/u with team, notes to file on closure:plan | 0.8 |

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| 3/23/21 | DS | Call with CT re photos of animals at SMD, rev stay | 0.6 |
| 4/26/21 | DS | Confer with CT re: stay | 0.3 |
| 4/27/21 | DS | Rev email and draft re: 60 day stay, make edits | 0.8 |
| 5/11/21 | DS | Rev and edit proposed fee stipulation; call with CT and PJ (.4) | 0.9 |
| 6/29/21 | DS | Call with CT and PJ re: status | 0.2 |
| 6/30/21 | DS | Rev data and sampling map, consider | 0.5 |
| 7/22/21 | DS | Rev corres from PJ re: DBD status and deadlines | 0.1 |
| 7/23/21 | DS | Rev sampling data | 0.3 |
| 7/30/21 | DS | Rev corres from DE re: data results and ideas | 0.2 |
| 8/23/21 | DS | Rev DBD/SMD "closure" plan, consider; rev email from DE re: critique. | 1.2 |
| 8/25/21 | DS | Rev and consider letter re: closure plan and ending stay, rev corres re: same | 0.8 |
| 9/1/21 | DS | Rev correspondences re: ending stay w/ court | 0.3 |
| 9/1/21 | DS | Rev and consider CT proposal on new case schedule, rev corres re: same (.4); call with CT and PJ (.2) | 0.6 |
| 9/13/21 | DS | Rev D's proposals and CT counter, consider, draft amended schedule and send to cocounsel; rev corres thereafter and consider. | 1.0 |
| 9/15/21 | DS | Prep and participate in hearing with J. Rice | 0.4 |
| 9/15/21 | DS | Email to client re: discovery response | 0.3 |
| 9/15/21 | DS | Rev outstanding discovery (.8) rev scheduling order (.2); begin working on response to DBD discovery requests | 4.2 |
| 9/16/21 | DS | Continue working on discovery response | 0.5 |
| 9/16/21 | DS | Corres with cocounsel and client re: discovery responses | 0.8 |
| 9/20/21 | DS | Call with CT and PJ re: discovery | 0.2 |
| 9/23/21 | DS | Call with CT and PJ re: status | 0.2 |
| 9/28/21 | DS | Rev Kray letter and search terms, consider (.7); rev past correspondence on search terms (.7); research re: 26b1 proportionality (.8), draft letter in response | 3.5 |
| 10/4/21 | DS | Rev and consider Volpe email re: deposition date and timing, send thoughts to litigation team in context of MTD & motion to amend | 0.2 |
| 10/6/21 | DS | Email to CT re: discovery response and review | 0.1 |
| 10/8/21 | DS | Rev discovery from DBD, consider | 4.2 |
| 10/8/21 | DS | Confer with CT and PJ re: disco and next steps | 0.4 |
| 10/8/21 | DS | Email to AVS re: DBD work | 0.1 |
| 10/11/21 | DS | Add'l work on disco response | 2.6 |
| 10/11/21 | DS | Rev newest letter re: search terms, consider (.3); rev notes and filings (.4); draft response | 1.7 |
| 10/12/21 | DS | Rev edits on letter, check and serve | 0.3 |
| 10/12/21 | DS | Rev non-responsive redactions (.3); research re:same (.6); draft R37 email | 1.2 |
| 10/12/21 | DS | Rev D's discovery | 2.5 |
| 10/14/21 | DS | Call with PJ re: disco and next steps | 0.3 |
| 10/14/21 | DS | Rev disco response and documents | 2.5 |

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| 10/19/21 | DS | Rev, consider, and edit FAC | 1.3 |
| 10/20/21 | DS | Draft R37 letter | 1.2 |
| 10/20/21 | DS | Rev updated amended complaint, consider | 0.3 |
| 10/22/21 | DS | Rev edits, make changes, and send R37 letter | 0.3 |
| 10/24/21 | DS | Rev and consider correspondence from Kray re: discovery and redactions | 0.2 |
| 10/22/21 | DS | Add'l disco review | 1.2 |
| 10/25/21 | DS | Calls with PJ, CT re: DBD disco response (.2); emails re: same | 0.5 |
| 10/27/21 | DS | Prep for and hold conference with opposing counsel re: search terms and R37 letter | 2.3 |
| 10/27/21 | DS | Confer with CT/PJ following R37 conferral | 0.3 |
| 10/28/21 | DS | Rev corres, Draft stipulated motion re: FAC, consider | 0.4 |
| 10/28/21 | DS | Consider search terms in-depth, review docs already produced with eye toward search terms, go through list and re-draft, emails re: same with litigation team | 3.4 |
| 11/2/21 | DS | Rev Volpe email re: additions to stipulation, consider, review rules, and respond | 0.2 |
| 11/3/21 | DS | Call with CT and PJ re: FAC | 0.2 |
| 11/8/21 | DS | Rev FAC and stip (.5); emails and calls with team re: filing stip and amended complaint | 1.2 |
| 11/9/21 | DS | Rev past corres, past disco, check notes, and write email re: case management and disco issues (1.3); confer with PJ and CT re: same (.4); edit and send (.1) | 1.8 |
| 11/10/21 | DS | Confer with PJ re: outstanding issues (.2); rev file with expert data and consider what else experts will need (.8) | 1.0 |
| 11/15/21 | DS | Call with CT and PJ re: service | 0.2 |
| 11/17/21 | DS | Rev FV email re: confirm receipt and accepting service of FAC, write email to team re: same | 0.3 |
| 11/23/21 | DS | Phone call CT re: service (.2); email to PJ re: same | 0.4 |
| 12/13/21 | DS | Email to cocounsel re: DeCoster response to discovery | 0.2 |
| 12/14/21 | DS | Rev discovery | 2.5 |
| 12/14/21 | DS | Call with CT re: next steps in case, strategy | 0.3 |
| 12/22/21 | DS | Confer with CT and PJ re: DeCoster dep | 0.2 |
| 1/6/22 | DS | Call with CT and PJ re: MTD response | 0.2 |
| 1/7/22 | DS | Rev Defs' MTD Count II (.3); edit, revise, and redraft MTD Opposition (2.2) | 2.5 |
| 1/7/22 | DS | Rev other MTD filings and consider | 1.2 |
| 1/10/22 | DS | Read WDH WAI MTD again for context (.3); read cases (.8); rev and edit response in opposition, adding in factual allegations (2.3) | 3.4 |
| 1/11/22 | DS | Read MTD re: non-wash D's and pertinent cases (.8); edit and revise first draft (2.4); call with CT (.2) | 3.4 |
| 1/12/22 | DS | Call with CT re: response | 0.2 |

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| 1/13/22 | DS | Hardcopy edits on all MTD responses, further edits, finalize for filing (3.8); call with CT and PJ re:status (.3) | 4.1 |
| 1/19/22 | DS | Rev emails re: motion to lift seal and confidentiality, confer with CT re: same | 0.3 |
| 1/20/22 | DS | Rev and edit motion to expedite, motion to unseal | 1.8 |
| 1/21/22 | DS | Call with CT re: status | 0.1 |
| 1/24/22 | DS | Call with CT and PJ re: discovery | 0.2 |
| 2/3/22 | DS | Prep and participate in hearing on DBD MTD | 1.1 |
| 2/7/22 | DS | Rev decision on MTD (.4); call with CT and PJ (.3) | 0.7 |
| 2/8/22 | DS | Call with CT and PJ re: discovery | 0.2 |
| 2/16/22 | DS | Call with CT and PJ re: status | 0.2 |
| 3/4/22 | DS | Rev corres re: settlement, consider; call with CT and PJ | 0.4 |
| 3/14/22 | DS | Call with CT re: next steps | 0.2 |
| 3/18/22 | DS | Begin review of discovery re: R37 and completeness | 4.2 |
| 3/21/22 | DS | Rev draft rog/rfp, edit, consider | 1.0 |
| 3/22/22 | DS | Continue disco review | 3.8 |
| 3/23/22 | DS | Confer with CT/PJ re: next steps | 0.2 |
| 3/23/22 | DS | Add'l discovery review, notes to file (4.5); call with CT, PJ re: next steps (.2) | 4.7 |
| 3/24/22 | DS | Continue disco review | 4.9 |
| 3/28/22 | DS | Rev Corres, rev edits from CT, rev R37 letter, send to opposing counsel | 0.5 |
| 3/29/22 | DS | Cont. disco review | 3.5 |
| 4/21/22 | DS | Rev settlement proposal in detail, consider, confer with team re: same | 1.0 |
| 4/22/22 | DS | Confer with team re: DBD developments and settlement | 0.3 |
| 4/22/22 | DS | Consider categories for terms for counterproposal | 0.4 |
| 4/25/22 | DS | Call with CT and PJ re: DBD meeting | 0.2 |
| 6/8/22 | DS | Confer with CT re: discussions with Glessner | 0.2 |
| 7/6/22 | DS | Call with CT and PJ re: next steps | 0.2 |
| 7/13/22 | DS | Call with CT and PJ re: CD | 0.2 |
| 7/26/22 | DS | Confer with CT/PJ re: next steps | 0.2 |
| 8/15/22 | DS | Careful edit and review of draft CD | 2.2 |
| Total | | | 340.4 |

| Date | Atty | LOCMT fees | Time |
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| 11/7/22 | JF | Review consent decree draft and docket (2.8) participate in Board call with Friends (1.1); discuss status with CT (.2) | 4.1 |
| 11/8/22 | JF | Review complaint (1.2); review motion to dismiss (0.4); review response to motion to dismiss (1.5). | 3.1 |
| 11/9/22 | JF | Review response to motion to dismiss, reply ISO, and order on MTD (1.7); review and draft correspondence re: discovery (1.7) | 3.4 |
| 11/11/22 | JF | Review order; research CWA and RCRA | 2.3 |
| 11/13/22 | JF | Continue research on CWA and RCRA | 1.8 |
| 11/14/22 | JF | Review order (.7); discuss with CT (.5) | 1.2 |
| 11/15/22 | JF | Further discuss with CT (1.0); call with DE and CT (1.2) | 2.2 |
| 11/16/22 | JF | Draft update letter and review CT comments (1.2) | 1.2 |
| 11/28/22 | JF | Update electronic file | 0.4 |
| 12/1/22 | JF | Review FAC, status report, and correspondence with Gary Baise (.5); call with CT and DS re:status (.3) | 0.8 |
| 12/8/22 | JF | Review email correspondence | 0.1 |
| 12/19/22 | JF | Participate in call with CT and Glessner | 0.6 |
| 12/28/22 | JF | Participate in call with CT, Glessner, and Dave E and follow up (1.0); discuss expert report with CT (.3); review consent decree and notes from call (1.0). | 2.3 |
| 12/29/22 | JF | Review email proposal from Glessner; compare:with CD and notes from call. | 1.5 |
| 1/2/23 | JF | Review drafts in preparation for expert report | 0.2 |
| 1/3/23 | JF | Consult with Dr. Nachman; discuss with CT | 0.7 |
| 1/4/23 | JF | Discuss expert report and discovery issues with CT and DS | 1.0 |
| 1/5/23 | JF | Confer with Michael Russelle and debrief with CT | 0.8 |
| 1/10/23 | JF | Review expert report draft | 0.7 |
| 1/11/23 | JF | Review search terms | 0.3 |
| 1/12/23 | JF | Discuss depositions with CT and DS (1.1); review discovery (0.4) | 1.5 |
| 1/13/23 | JF | Converse with G.Baise and J. Carroll re: discovery and prepare:PHV application (1.4); prepare:for deposition (0.3); further revise PHV (1.0); file motion (0.4) | 3.1 |
| 1/14/23 | JF | Review expert documents; review Chavarin documents | 1.1 |
| 1/15/23 | JF | Review Chavarin documents in preparation for deposition (5.3); call with CT re:same (.2) | 5.5 |
| 1/16/23 | JF | Continue review of Chavarin documents in preparation for deposition | 3.8 |
| 1/17/23 | JF | Consult with CT on depositions and review 30(b)(6) (0.6); prepare:for and consult with expert Kieve Nachman (0.7); Draft 30(b)(6) notices for non-Washington defendants (0.6); prepare:deposition documents and outline (2.7). | 4.6 |
| 1/18/23 | JF | Prepare:for and participate in Karina Chavarin deposition (2.7); debrief with CT and DS (.3); review subpoena documents and prepare:Daniel Chavarin deposition outline (4.3) | 7.3 |

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| 1/19/23 | JF | Finalize documents for deposition (0.8); take deposition of Daniel Chavarin (2.0); debrief with CT and DS (.3); Review 30(b)(6) (0.1) | 3.2 |
| 1/20/23 | JF | Discuss next steps with CT (0.3); review Erickson report (0.1) | 0.4 |
| 1/23/23 | JF | Participate in deposition for Scott Stephen (7.2); work on follow-up issues (.3) | 7.5 |
| 1/24/23 | JF | Draft response to opposing counsel re: Stephen deposition | 1.8 |
| 1/25/23 | JF | Correspond with experts re: subpoena responses (0.2); review client notes on government meeting (0.1); discuss status with CT (0.1); review changes to letter to opposing counsel (0.1) | 0.5 |
| 1/30/23 | JF | Communicate with Kieve Nachman (0.7); connect with CT re: expert reports (0.3) | 1.0 |
| 1/31/23 | JF | Review updated Nachman expert report (0.1); review correspondence re: discovery (0.2) | 0.3 |
| 2/1/23 | JF | Update Nachman report | 3.8 |
| 2/2/23 | JF | Review WET analysis, review Farallon analysis, and incorporate same in Nachman report (6.3); call with DS re: expert reports (0.5); call with CT re:Nachman report (0.2) | 7.0 |
| 2/3/23 | JF | Update Nachman report citations | 2.6 |
| 2/4/23 | JF | Revise background info in Nachman report | 1.2 |
| 2/5/23 | JF | Further update background info; further revise citations; revise section on nitrates; further prepare:updated draft for circulation to CT | 6.7 |
| 2/6/23 | JF | Revise Nachman report re: Cow Palace, CDWP, and other matters | 3.2 |
| 2/7/23 | JF | Update Nachman report and circulate revised draft to CT and DS | 1.4 |
| 2/8/23 | JF | Review Erickson report (0.7); review Nachman report (0.3); call with CT re:Nachman report (0.2) | 1.2 |
| 2/9/23 | JF | Review Nachman report (0.2); correspond with Erickson (0.2); call with CT (0.2); review Erickson Cow Palace report (3.5) | 4.1 |
| 2/11/23 | JF | Further revise Erickson Cow Palace Report | 0.2 |
| 2/13/23 | JF | Confer with K. Nachman and CT re: report (1.1); revise report to incorporate feedback (2.6) | 3.7 |
| 2/14/23 | JF | Further revise Nachman report | 2.3 |
| 2/15/23 | JF | Confer with CT about expert documents (0.2); Review docket (1.0); review correspondence with opposing counsel (0.2); Review Erickson report and revise same (1.2) | 2.6 |
| 2/17/23 | JF | Review Erickson report and prior sampling data (4.0); Participate in call with Glessner (0.7); review discovery documents (1.0) | 5.7 |
| 2/18/23 | JF | Consolidate prior reports on well data | 0.7 |
| 2/19/23 | JF | Continue consolidating soil and groundwater data (1.3); Review Farallon soil data (0.8) | 2.1 |
| 2/20/23 | JF | Consult with Erickson re: lagoon leakage analysis (0.9) | 0.9 |

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| 2/21/23 | JF | Consult with Erickson (0.7); revise Erickson report re:background information (2.8); review NRCS standards (0.5); revise citations and other outstanding issues in Nachman report and circulate updated draft (3.0); call with CT re:reports (0.3) | 7.3 |
| 2/22/23 | JF | Review photos for Erickson report (0.2); finalize deposition citations for Nachman report (0.3); further revise Nachman report and circulate updated draft (1.2); draft motion and proposed order (1.8); call with CT re: expert reports (0.1) | 3.6 |
| 2/23/23 | JF | Update motion and order and set up for filing (1.3); revise Erickson report (3.2) | 4.5 |
| 2/24/23 | JF | Continue draft of Erickson report re: personal background information and background re: Yakima | 3.2 |
| 2/26/23 | JF | Revise all draft sections re: nitrate contamination | 2.5 |
| 2/27/23 | JF | Finalize analysis sections of Erickson draft and circulate to CT (3.9); call with CT re: expert reports (0.2) | 4.1 |
| 2/28/23 | JF | Review outstanding discovery tasks (0.2) | 0.2 |
| 3/2/23 | JF | Review Erickson updates on expert report (0.3); | 0.3 |
| 3/3/23 | JF | Call with Erickson, CT, and DS re: manure:seepage (1.0); revise report (0.4) | 1.4 |
| 3/5/23 | JF | Discuss CDWP and Wassemler with CT for reports | 0.2 |
| 3/7/23 | JF | Review updates on Erickson report | 0.4 |
| 3/8/23 | JF | Review seepage chart (0.1); add further info on sources consulted for Erickson report (0.4); revise Erickson report to include additional data and other items and circulate updated draft with new source documents (1.2); review reverse osmosis studies (0.6) | 2.3 |
| 3/9/23 | JF | Update and circulate near-final draft of Nachman report (1.0); review Erickson draft (0.4); revise Russelle report citations (5.4) | 6.8 |
| 3/10/23 | JF | Communicate with Erickson re: report exhibits (0.2); Finalize and circulate Nachman and Russelle drafts (3.6); finalize and circulate Erickson draft (1.8); serve Idaho defendants (0.2); review defendants' reports (0.2); call with CT re: Erickson report (0.2) | 6.2 |
| 3/13/23 | JF | Discuss status with DS and CT (0.8); review motion for sanctions and research law in connection with same (3.2) | 4.0 |
| 3/14/23 | JF | Revise motion to compel and draft motion to expedite and proposed order (1.7); revise declaration and file motions and proposed order (3.4); update docket (0.7) | 5.8 |
| 3/15/23 | JF | Review Farallon data (0.5); prepare:document production for expert reports (0.4); review correspondence from Mr. Carroll re: depositions (0.2); call with CT (0.2) | 1.3 |
| 3/16/23 | JF | Review new correspondence re: depositions (0.2); review all documents relied on in reports in preparation for production (2.6) | 2.8 |
| 3/17/23 | JF | Update Dropbox and review correspondence re: depositions; call with CT re: discovery (.2) | 1.7 |

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| 3/20/23 | JF | Finalize motion for additional depositions (4.4); review correspondence re: Farallon data (0.2) | 4.6 |
| 3/21/23 | JF | Revise motion, draft declaration, exhibits, motion to expedite, and proposed order (3.1); provide document access to client (0.1); prepare:Farallon subpoena (0.7) | 3.9 |
| 3/22/23 | JF | Finalize and file all motions and email court with proposed order (1.5); continue preparing subpoena (0.6); organize and update file (0.9) | 3.0 |
| 3/23/23 | JF | Review correspondence re: expert depositions and rebuttal reports (0.3); circulate draft subpoena for Farallon (0.5); finalize and circulate Farallon RFP and discuss with DS (0.8) | 1.6 |
| 3/24/23 | JF | Correspond with experts re: depositions (0.2); finalize and serve Farallon subpoena (1.3); review opposition to motion to compel documents (0.2); call with CT re:expert depositions (0.2) | 1.9 |
| 3/27/23 | JF | Correspond with Kieve re: depositions (0.2); connect with CT re: response to discovery motion (0.2); finalize and circulate deposition calendar (1.0) | 1.4 |
| 3/28/23 | JF | Revise reply to response to motion to compel (1.2); draft declarations and compile exhibits in connection with same (3.1) | 4.3 |
| 3/29/23 | JF | Review reply memo (0.2); discuss matter with CT (0.2); finalize and file reply memo, DS decl., and CT decl. (4.7); file reply to motion for additional depositions (0.2) | 5.3 |
| 3/30/23 | JF | Download privilege log (0.1) | 0.1 |
| 3/31/23 | JF | Access and download Glessner documents | 0.3 |
| 4/3/23 | JF | Review correspondence from co-counsel re:expert reports (0.2); discuss expert depositions with CT (0.2) | 0.4 |
| 4/4/23 | JF | Check docket (0.1); review Glessner docs (0.8) | 0.8 |
| 4/5/23 | JF | Review correspondence with opposing counsel re: depositions (0.3); review docket (0.2) | 0.5 |
| 4/6/23 | JF | Review correspondence with opposing counsel re: depositions (0.2); correspond with CT re: Nachman deposition (0.1); revise response to Hicks report (0.6) | 0.9 |
| 4/7/23 | JF | Confer with CT re: depositions (0.2); review Erickson report (0.5); review deposition schedule (0.4); correspond with CT and DS re: Farallon and Defs. RFPs (0.2); revise rebuttal response to Hicks report (1.7) | 3.0 |
| 4/8/23 | JF | Revise rebuttal response to Hicks report | 2.4 |
| 4/10/23 | JF | Review correspondence re: discovery and correspond with DT and DS re:same (0.4); Discuss deposition scheduling with CT and DS (0.5); correspond with Erickson re: deposition date (0.2); update deposition schedule (1.0); draft proposed email re: dates (0.3); review Erickson rebuttal (1.3); prepare:for Mendoza deposition (0.2) | 3.9 |
| 4/11/23 | JF | Draft email re: discovery disputes (0.8) | 0.8 |

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| 4/12/23 | JF | Calls with CT re:status and strategy (0.4); draft and circulate email re: discovery disputes (3.0); prepare:for depo meetings with Kieve, Jean, and Rosemary (0.6); review Russelle rebuttal report (0.3) | 4.3 |
| 4/13/23 | JF | Review draft correspondence re:discovery (0.2); confer with Kieve Nachman and CT re: deposition (1.4); draft subpoenas for Duke and Cliff (0.5); revise and circulate email to opposing counsel re: discovery (0.2); review latest Russelle rebuttal draft (0.3); confer with Jean Mendoza about deposition (1.5); review Hicks and Stephen rebuttals (0.8) | 4.9 |
| 4/14/23 | JF | Review correspondence re: discovery from Jay Carroll and DS (0.2); review and revise Hicks rebuttal (0.4); review, revise, and circulate all rebuttal opinions (2.0); deposition meeting with Rosemary Wassemiller (1.8); discuss status with CT (0.3); draft notice and subpoena for Glessner depo (0.8) | 5.5 |
| 4/15/23 | JF | Correspond with CT, DS, and experts re: rebuttal opinions (0.3); revise and circulate Glessner notice and subpoena (0.4) | 0.7 |
| 4/17/23 | JF | correspond with Central Court reporting re: deposition (0.4); prepare:supplemental discovery (3.6); review objection to Glessner deposition and correspond with CT and DS re:same (0.2) | 4.2 |
| 4/18/23 | JF | Participate in deposition of Jean Mendoza (1.4); debrief Mendoza dep with CT (0.4); draft supplemental disclosure:(2.1); speak with R. Wassemiller re: deposition (0.2); defend Wassemiller deposition (1.4) | 5.5 |
| 4/19/23 | JF | Review consent decree (0.5); confer with CT re: case status (0.2); review ammonia toxicity limits (0.3); review Glessner docs (0.9) | 1.9 |
| 4/20/23 | JF | Revise consent decree (3.1); discuss with CT (0.2) | 3.3 |
| 4/21/23 | JF | Revise consent decree re: paragraph 55 and other near-final changes | 1.0 |
| 4/24/23 | JF | Revise exhibits and confer with Dave E re: same (0.3); participate in meeting with FOTC (0.7); revise CD formatting (0.2); prepare:consent decree exhibits (1.7); confer with CT re: exhibits (0.3); draft and send email to Defendants re: exhibits (0.8); draft and send email to Dave E re: our side's exhibits (0.3) | 4.3 |
| 4/25/23 | JF | Correspond with experts on exhibits (0.3); Prepare:for fee petition (0.2); review draft exhibits (0.7); correspond with CT, DS, and Dave E regarding CD exhibits (0.7) | 1.9 |
| 4/26/23 | JF | Review exhibits with Dave E (0.3); confer with CT re: exhibit status (0.4); prepare:follow up email to Glessner re: CD exhibits 1.7) | 2.4 |
| 4/27/23 | JF | Correspond with WET re: soil analysis (0.4); draft email to Glessner re: all exhibits (2.4); review exhibits from WET (0.2); confer with CT and Jess re: site monitoring maps (0.4); perform field comparison analysis (0.9) | 4.3 |
| 4/28/23 | JF | Review correspondence re: Michael Russelle comments (0.2); finalize and review analysis of DBD and SMD fields and circulate to CT (2.8); | 3.3 |

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| 5/1/23 | JF | Correspond with CT re: status (0.3); review exhibits and prepare:email for Michael Russelle re: field applications (1.8); review order on discovery motion (0.4) | 2.5 |
| 5/2/23 | JF | Finalize and circulate email re: CD exhibits to Glessner (2.6) | 2.6 |
| 5/4/23 | JF | Correspond with Jess Alexander re: exhibits (0.4); ; work on finalizing consent decree (0.7) | 1.5 |
| 5/5/23 | JF | Review draft exhibits from Stephen and WET (0.5); confer with CT re: status and strategy (0.2); continue finalizing CD (1.4) | 2.1 |
| 5/6/23 | JF | Review field soil moisture:analysis (0.7); revise Exhibit 6 proposal (2.1); review Glessner email re: exhibits and correspond with CT and DE re: same (0.5) | 3.3 |
| 5/7/23 | JF | Correspond with Jess Alexander re: Exhibit 3 (0.2); review Exhibit 6 maps (0.7); correspond with Michael Russelle re: same (0.1); work on fee petition (0.6) | 1.6 |
| 5/9/23 | JF | Correspond with Jess Alexander re: Exhibit 3 (0.2); review Exhibit 6 maps (0.7); correspond with Michael Russelle re: same (0.1); work on fee petition (0.6) | 1.6 |
| 5/10/23 | JF | Review correspondence from M. Russelle re: Exhibit 6 (0.2); correspond with M. Russelle (0.3); call with CT re:exhibits (0.2) | 0.7 |
| 5/11/23 | JF | Review correspondence from Jess Alexander re: CD (0.3); correspond with DS on exhibits and CD language (0.3); correspond with Jess Alexander re: CD language (0.1); correspond with CT re: drilling timing (0.3); correspond with M. Russelle re: Exhibit 6 (0.9); correspond with Jess re: Exhibit 6 (0.2); review correspondence from Jean Mendoza and Amy van Saun re: soil phosphorous levels (0.2); call with CT re:exhibits (0.2) | 2.5 |
| 5/12/23 | JF | Review revised map from Jess Alexander and correspond with Jess re: same (0.6); review further revised Exhibit 6 (0.2); discuss status with CT (0.2); draft and circulate email to John Glessner re: status of exhibits (0.5); correspond with CT and Dave re: Exhibit 3 and questions re: CD language (0.2) | 1.7 |
| 5/15/23 | JF | Review correspondence from Jess Alexander (0.1); correspond with Jess re: Consent Decree and drilling schedules (0.7); prepare:joint notice of settlement (1.7) | 2.5 |
| 5/16/23 | JF | Review response from John Glessner re: exhibits (0.2); draft email to Glessner re: CD (1.2); review Glessner email re: filing (0.2); call with CT re: CD (0.2) | 1.8 |
| 5/17/23 | JF | Review correspondence from J. Glessner and J. Carroll (0.3); review correspondence from CT re: notice filing (0.1); revise settlement notice and circulate to opposing counsel (0.3) | 0.7 |

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| 5/18/23 | JF | Converse with Jess regarding CD and RI (0.6); correspond with CT re: Jess Alexander's comments (0.3); review possible revisions to CD (0.7); discuss CD language and notice with CT (0.2); prepare:changes to CD and draft follow up email to DBD (0.8); follow up with J. Carroll re: Notice (0.2) | 2.8 |
| 5/19/23 | JF | Review correspondence regarding the CD (0.2); review correspondence from Jean Mendoza re: Washington CAFO permitting (0.2) | 0.4 |
| 5/22/23 | JF | Review correspondence re: consent decree and exhibits (0.3); revise and circulate joint notice and review correspondence re:same (0.4); file joint notice of settlement and update docket (0.3) | 1.3 |
| 5/23/23 | JF | Discuss status with CT (0.2); review correspondence from CT to J. Glessner (0.1) | 0.3 |
| 5/27/23 | JF | Review Glessner email re: exhibits (1.2) | 1.2 |
| 5/29/23 | JF | Review status of all CD exhibits (0.4) | 0.4 |
| 5/30/23 | JF | Discuss outstanding issues with CD and exhibits with CT (0.2); review John Glessner email re: CD (0.2) | 0.4 |
| 6/1/23 | JF | Discuss status with CT (0.2); review exhibits 8 and 10 and corr with CT and DE re: same (0.6); review exhibit 3 and correspond with CT re: same (0.3) | 1.1 |
| 6/2/23 | JF | Confer with CT, John Glessner re: changes to CD (1.1); draft and circulate email to John Glessner re: CD and exhibits (0.8); review and finalize groundwater pump and treat memo (1.3) | 3.2 |
| 6/5/23 | JF | Review correspondence from CT and DS re: finalizing Consent Decree (0.2); review correspondence between CT and John Glessner re: Consent Decree (0.2); finalize and circulate pump and treat memo to John Glessner and WET (0.6); prepare fee petition (0.5); confirm signatures on CD (0.2) | 1.7 |
| 6/6/23 | JF | Discuss status and action items for finalization with CT (0.2); revise and circulate CD to John Glessner (0.2) | 0.4 |
| 6/7/23 | JF | Review correspondence between CT and John Glessner (0.2); review Exhibit 2 revisions (0.6); draft and circulate email re: liner details to John Glessner (0.4); work on fee petition (0.7); call with CT re: Exhibit 2 (0.2) | 2.1 |
| 6/8/23 | JF | Review correspondence regarding settlement from John Glessner (0.2); confer with CT re: filing status (0.2); draft joint motion for entry of consent decree (1.2) | 1.6 |
| 6/9/23 | JF | Finalize joint motion, CD, and all exhibits in preparation for filing (0.9); file joint motion and CD (0.2); call with CT re: same (0.2); correspond with stakeholders re: filing (0.7); update docket and internal files (0.3) | 2.3 |
| 6/12/23 | JF | Review correspondence re: consent decree (0.3); create timeline for future:CD action items (1.3) | 1.6 |
| 6/14/23 | JF | Review corres from DS re: fee petition (0.2); prepare:fee petition (1.2) | 1.4 |
| 6/17/23 | JF | Prepare:bills in connection with fee petition | 0.5 |
| 6/19/23 | JF | Prepare:bills in connection with fee petition | 1.8 |

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| 6/20/23 | JF | Confer with DS re: fee petition (0.3); review timesheets in connection with fee petition (4.2) | 4.5 |
| 6/21/23 | JF | Continue bill review in connection with fee petition | 3.0 |
| 6/22/23 | JF | Review correspondence from DS and CT re: bills in connection with fee petition (0.2); continue reviewing bills in connection with same (6.0); prepare email to Glessner re: same (0.2) | 6.4 |
| 6/28/23 | JF | Continue post-CD action item checklist and finalize/circulate draft to CT and DS (1.5) | 1.5 |
| 6/29/23 | JF | Review correspondence from DS re CD action item checklist (0.2); revise and circulate to WET (0.4) | 0.6 |
| 7/7/23 | JF | Review edits to post CD-action item list and correspond with JA re: same (0.4); discuss status of action items with CT (0.1) | 0.5 |
| 8/15/23 | JF | Review correspondence re fee petition (0.3) | 0.3 |
| 8/16/23 | JF | Prepare fee petition (0.5); call with CT re fee petition (0.4); review <i>Cow Palace</i> fee order and related case law (2.0); correspond with CT re: DBD payments and fee petition (0.7) | 3.6 |
| 8/17/23 | JF | Review correspondence from CT re: fee petition (0.2); review RCRA fee-shifting provision and case law (0.3); work on fee petition (2.4) | 2.9 |
| 8/18/23 | JF | Review correspondence from CT re: fee petition (0.3); continue draft (0.7) | 1.0 |
| 8/21/23 | JF | Call with CT re fee petition (0.2); continue work on fee petition (1.7) | 1.9 |
| 8/22/23 | JF | Review case law re prior attorney fee awards (1.3; correspond with DS re fee petition (0.3) | 1.6 |
| 8/23/23 | JF | Review correspondence between CT and opposing counsel re: briefing schedule (0.2) | 0.2 |
| 8/27/23 | JF | Review documents in connection with fee petition (0.3) | 0.3 |
| 8/30/23 | JF | Continue drafting fee petition | 1.4 |
| 8/31/23 | JF | Continue drafting fee petition | 4.9 |
| 9/3/23 | JF | Revise and circulate Tebbutt declaration | 6.7 |
| 9/5/23 | JF | Review correspondence from CT re: fee matrix (0.2); call with DS re fee petition (0.2); research and calculate rates based on fee matrix and locality adjustment (1.5) | 1.9 |
| 9/6/23 | JF | Revise draft background regarding case dispute (2.5); revise draft argument section of fee petition (2.1); review Laffey Matrix (0.3); finalize and circulate draft fee petition to CT and DS (1.3) | 6.2 |
| 9/7/23 | JF | Review DS edits to fee petition (0.4); correspond with CT and DS re Laffey Matrix and USAO matrix (0.3); review DS declaration (0.2); correspond with DS re SDTs (0.4) | 1.3 |
| 9/8/23 | JF | Review correspondence from Blythe Chandler re fee petition declaration (0.2); review CT edits to fee petition (0.5); call with CT re attorney rates (0.2) | 0.9 |
| 9/10/23 | JF | Update CT declaration | 0.9 |
| Total | | | 367.0 |

| Date | Atty | LOCMT fees | Time |
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| 1/14/19 | PJ | draft Public records requests for Annual | 0.5 |
| 1/24/19 | PJ | draft Rule 34 notice | 1.0 |
| 1/25/19 | PJ | draft 1st set of int/rfp | 1.3 |
| 2/5/19 | PJ | meeting w clients to discuss potential action | 2.2 |
| 2/8/19 | PJ | finalize NOI | 1.3 |
| 2/11/19 | PJ | served NOIs | 1.2 |
| 2/14/19 | PJ | drafted complaint | 1.7 |
| 3/15/19 | PJ | drafted complaint | 3.1 |
| 3/19/19 | PJ | calculated seepage rates | 0.9 |
| 3/20/19 | PJ | edited PLFS 1st set of RFPs/Ints | 1.1 |
| 3/21/19 | PJ | rev'd inspection reports for nitrate levels | 1.0 |
| 4/11/19 | PJ | searched property records for land ownership | 1.8 |
| 4/12/19 | PJ | edited complaint | 2.7 |
| 4/16/19 | PJ | drafted protective supp noi | 0.8 |
| 4/17/19 | PJ | finalize and serve supp NOI | 2.3 |
| 4/30/19 | PJ | drafted retainer/co-counsel agreements | 1.5 |
| 5/4/19 | PJ | edited complaint | 0.6 |
| 5/14/19 | PJ | edited complaint to combine with SMD | 1.7 |
| 5/23/19 | PJ | edit and finalize complaint, summons, and | 4.4 |
| 5/29/19 | PJ | rev'd and filed FOTC retainer | 0.4 |
| 5/31/19 | PJ | call with counsel to discuss CT call with | 0.4 |
| 6/3/19 | PJ | legal strategy meeting (.2); research Anti-Duplication provision of RCRA (2.1) | 2.3 |
| 6/4/19 | PJ | research CWA and relation to GW/WA | 3.7 |
| 6/5/19 | PJ | prepare:request for waiver, waiver of services forms and serve (2.4); research caselaw on | 4.7 |
| 6/6/19 | PJ | prepared notes on standing decls | 1.9 |
| 6/10/19 | PJ | draft standing decl. for Reddout, Kimbrell (2.9); draft cert of service and filed waiver of | 3.5 |
| 6/11/19 | PJ | rec'd and update docket with filings | 0.2 |
| 6/12/19 | PJ | drafted Mendoza decl. (.7); research info for and create notes on standing decls. (.7) | 1.4 |
| 6/13/19 | PJ | rev'd recent GWMA well data for homes near DBD/SMD(.6); email Van Saun re: standing (.4); emails standing info to co-counsel (.6); | 3.3 |
| 6/21/19 | PJ | call with CFS | 0.3 |
| 6/24/19 | PJ | email Mendoza re: standing | 0.3 |
| 6/27/19 | PJ | discuss records with Dan (.2); draft and | 0.8 |
| 6/28/19 | PJ | email WSDA response re: PRR (.4); email | 0.6 |
| 7/1/19 | PJ | email correspondence with Ecology Air | 0.2 |
| 7/1/19 | PJ | researched and made outline notes of local | 1.6 |

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| 7/2/19 | PJ | email correspondence with Ecology re: PRR | 0.2 |
| 7/8/19 | PJ | call with co counsel re: Settlement | 0.4 |
| 7/9/19 | PJ | filed and reviewed PRR submissions (1.5); | 2.8 |
| 7/10/19 | PJ | researched DMD/SMD ERTS complaints (.7); edited settlement proposal (1.1) | 1.8 |
| 7/19/19 | PJ | work on litigation strategy | 3.1 |
| 7/23/19 | PJ | meeting with counsel to discuss settlement | 0.5 |
| 7/25/19 | PJ | worked on reviewing recently received public records (.7); received and filed Kray NOA | 0.9 |
| 7/29/19 | PJ | RCRA Anti-Duplication research(.9); public | 1.2 |
| 7/29/19 | PJ | research standing and standing designees info | 2.2 |
| 7/30/19 | PJ | received and reviewed public records for 2018 | 2.0 |
| 7/31/19 | PJ | drafted template for court filings | 0.6 |
| 7/31/19 | PJ | research PHV motions | 0.4 |
| 8/2/19 | PJ | draft PHV motion | 1.5 |
| 8/6/19 | PJ | read and reviewed MTD | 0.9 |
| 8/6/19 | PJ | research WA CAFO permit regs referenced in | 1.4 |
| 8/7/19 | PJ | researched MTD caselaw | 1.5 |
| 8/8/19 | PJ | work on drafting litigation/schedule strategy | 5.8 |
| 8/9/19 | PJ | work on initial prep for MTD response | 3.1 |
| 8/16/19 | PJ | rec'd batch of public records from Ecology/WSDA; rev'd new records including | 3.7 |
| 8/19/19 | PJ | researched improper group pleading | 1.5 |
| 8/19/19 | PJ | edit and format Standing Decs. | 4.7 |
| 8/20/19 | PJ | draft response to MTD | 5.7 |
| 8/21/19 | PJ | draft response to MTD (3.6); email client (.2) | 3.8 |
| 8/22/19 | PJ | call with client re: standing dec; make edits to | 2.2 |
| 8/23/19 | PJ | finalize and send for sig Mendoza dec (1.2); finalize Reddout dec (1.8); edit Response to | 3.9 |
| 8/26/19 | PJ | finalize PHV motion | 1.1 |
| 8/26/19 | PJ | finalize and file response to MTD | 2.5 |
| 9/3/19 | PJ | email co counsel | 0.3 |
| 9/4/19 | PJ | register for WA ECF | 0.4 |
| 9/10/19 | PJ | read and rev'd reply to response to mtd | 1.1 |
| 9/10/19 | PJ | read and rev'd settlement proposal from opp. | 1.0 |
| 9/18/19 | PJ | complete registration for ECF ED WA | 0.4 |
| 9/25/19 | PJ | read Response to motion to strike, researched | 1.9 |
| 10/16/19 | PJ | research MTD cases and start preparing for | 2.2 |
| 10/18/19 | PJ | read and rev'd counteroffer letter | 1.3 |
| 10/21/19 | PJ | review email from court cancelling oral arg. | 0.2 |
| 10/25/19 | PJ | read court's MTD decision | 0.8 |
| 10/29/19 | PJ | researched property records for Wa AG and | 1.2 |

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| 10/31/19 | PJ | draft scheduling order status report | 3.5 |
| 11/7/19 | PJ | rev'd and made notes on Defs' answer | 1.6 |
| 11/11/19 | PJ | rev'd D's edited to status report and | 0.7 |
| 11/12/19 | PJ | filed status report | 0.7 |
| 11/18/19 | PJ | settlement call (.7); debrief with CT (.2); sent | 1.2 |
| 11/19/19 | PJ | compiled soil and other data to send to Expert | 1.5 |
| 11/22/19 | PJ | call with clients | 0.3 |
| 11/26/19 | PJ | scheduling call with court | 0.2 |
| 11/27/19 | PJ | Review and update docket file | 0.6 |
| 12/3/19 | PJ | travel to Yakima for settlement meeting including prep for meeting (7.6); meeting with | 10.1 |
| 12/4/19 | PJ | Site visit and settlement meeting (5.6); Travel | 7.8 |
| 12/5/19 | PJ | Travel back to Eugene (2.9); debrief with counsel (.3); review settlement discussion | 4.0 |
| 12/11/19 | PJ | rev'd and analyze DBD Manure:mgmt | 1.5 |
| 12/12/19 | PJ | prepare:working spreadsheet for DBD/SMD | 1.7 |
| 12/16/19 | PJ | analyzed DMD/SMD field location maps | 0.8 |
| 12/17/19 | PJ | rev'd dairy application documents in public records file (2.0); draft settlement meeting | 3.5 |
| 12/18/19 | PJ | rev'd and analyze export records (1.2); draft | 3.2 |
| 12/19/19 | PJ | finish Rule 34 notice and emailed draft for | 1.7 |
| 1/2/20 | PJ | read settlement letter from Opp. Counsel (.6); email Erickson re:Rule 34 notice(.2) | 0.8 |
| 1/3/20 | PJ | draft and send follow up response letter for | 2.1 |
| 1/6/20 | PJ | organize January docket dates and tasks due (.5); look up NAPT sampling methods and email correspondence with Cascade labs re: costs for Rule 34 inspection for sampling tests(.7); call with CT, DS (.2); begin drafting | 4.8 |
| 1/7/20 | PJ | calculated costs of various proposed sampling procedures (1.4); prepared and reviewed documents for Rule 26 production (3.0); email | 4.7 |
| 1/10/19 | PJ | draft and send email with lagoon tables | 0.5 |
| 1/13/20 | PJ | draft letter re: missing records | 1.9 |
| 1/14/20 | PJ | work on rule 26 disclosures | 1.1 |
| 1/15/16 | PJ | continue working on initial disclosures | 2.9 |
| 1/22/20 | PJ | Work on producing videos for Rule 26 (.4); conf call with Court (.2); draft status update for settlement (1.6); call with co counsel (.3); | 3.6 |
| 1/23/20 | PJ | edits to Rule 26 Initial Disclosures (1.1); work on document production for Rule 26 | 5.2 |
| 1/24/20 | PJ | finish document production for Rule 26 and | 5.7 |

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| 1/25/20 | PJ | finish transferring documents and post thumb | 1.0 |
| 1/28/20 | PJ | search Paris database for records | 0.9 |
| 1/30/20 | PJ | legal strategy meeting with DS, CT | 0.4 |
| 1/31/20 | PJ | | |
| 2/4/20 | PJ | began drafting manure/field proposal | 1.4 |
| 2/5/20 | PJ | finish drafting manure:management memo | 3.4 |
| 2/6/20 | PJ | rev'd and drafted notes on 26 disclosures(3.3);start drafting rule 37 letter | 4.4 |
| 2/7/20 | PJ | finish drafting rule 37 letter | 1.6 |
| 2/10/20 | PJ | read/rev'd recent settlement proposal/GW | 1.0 |
| 2/13/20 | PJ | rev'd GW data for DBD/SMD | 0.7 |
| 2/18/20 | PJ | setup Sharefile account and rev'd Rule 26 | 2.8 |
| 2/19/20 | PJ | start drafting Counter Proposal for settlement | 5.4 |
| 2/20/20 | PJ | start drafting In Camera letter for court | 0.8 |
| 2/21/20 | PJ | draft In Camera letter | 3.0 |
| 2/24/20 | PJ | finish drafting In Camera Letter(5.9); finish | 8.2 |
| 2/25/20 | PJ | Edit Counter Proposal and In Camera | 1.4 |
| 3/4/20 | PJ | Email Erickson re: R34 (.5); call with opp. counsel (.2); rev'd BioFiltro data and drafted | 2.4 |
| 3/5/20 | PJ | email Erickson aquifer data and lagoon data (.3); work on counter proposal (1.2) | 1.5 |
| 3/10/20 | PJ | compile field records and email to Erickson | 0.7 |
| 3/11/20 | PJ | follow-up research on Biofiltro | 1.3 |
| 3/12/20 | PJ | incorporate edits to In Camera (.9); create pdf maps for In Camera Attachment | 2.9 |
| 3/16/20 | PJ | update IC with PLFS' current proposal and | 2.7 |
| 3/17/20 | PJ | continue edits/updates to In Camera | 1.3 |
| 3/18/20 | PJ | draft Ables for In Camera | 2.5 |
| 3/19/20 | PJ | finalize and send In Camera | 2.1 |
| 3/23/20 | PJ | Legal strategy call with DS,CT (.7); research corporate structure/shell corps (3.1) | 3.8 |
| 3/24/20 | PJ | LS call wit CT, DS (.5); Supp NOI edits (1.5); conf call with Judge Suko (.3); review | 3.3 |
| 3/25/20 | PJ | research Wayne Cummings business history | 3.4 |
| 3/27/20 | PJ | research property records of ID, IA, OH, MD, NY for Glessner, DeCoster, Cummings | 6.1 |
| 3/30/20 | PJ | finish Wayne Cummings research (.9); call | 1.2 |
| 3/31/20 | PJ | research J.Glessner | 1.1 |
| 4/1/20 | PJ | prep for settlement call (.5); settlement call (.3); legal strategy call with CT, DE, MR (.4) | 1.2 |
| 4/2/20 | PJ | finalize Supp NOI | 1.4 |
| 4/3/20 | PJ | prep and finish serving Supp NOIs | 2.1 |

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| 4/8/20 | PJ | Update and edit Rule 34 notice (1.9), draft notes and strategy for adding LLC parties | 3.9 |
| 4/9/20 | PJ | Maine/Decoster/W Cummings records search (1.6); finalize and serve 1 Rogs/RFPs (1.6) | 3.2 |
| 4/14/20 | PJ | Maryland/Agri investment property records | 0.9 |
| 4/28/20 | PJ | download and review research files from TM | 1.0 |
| 4/29/20 | PJ | prepared discovery timeline | 0.8 |
| 4/30/20 | PJ | prep for call with Suko (.3); conf. call with | 0.8 |
| 5/1/20 | PJ | call with DS, CT to discuss R34 | 0.2 |
| 5/5/20 | PJ | edit, finalize, and serve R34 position paper | 1.1 |
| 5/6/20 | PJ | finalize and serve reply position paper for R34 (.6); confer with CT and DS (.4) | 1.0 |
| 5/7/20 | PJ | call with Judge Rice re:R34 (.3); phone with CT and DS (.2); email correspondence with CT, DE, MR re: soil sampling (.6); prepared | 2.7 |
| 5/11/20 | PJ | ph w/ CT and DS re:site agreement (.3) | 0.3 |
| 5/12/20 | PJ | call with CT. MR. DE re: R34 | 0.5 |
| 5/18/20 | PJ | travel to Grandview for R34 | 5.5 |
| 5/19/20 | PJ | R34 site inspection | 9.4 |
| 5/20/20 | PJ | travel back to Eugene (5.1); R34 Site | 13.2 |
| 5/21/20 | PJ | rev'd DFS' responses to PLFS' 1st | 3.7 |
| 5/27/20 | PJ | rev'd responsive documents for | 3.0 |
| 5/28/20 | PJ | LS call with DS, CT (1); prepare:doc. Subpoenas (1.8); drafted R37 letter (3.9) | 6.7 |
| 5/29/20 | PJ | edit R37 letter (1.2); prepare:PDF map of acreage/ownership of business entities with | 3.9 |
| 6/1/20 | PJ | work on DBD Legal Strategy doc(1.5); finish | 2.3 |
| 6/3/20 | PJ | LS call with DS, CT | 0.3 |
| 6/12/20 | PJ | LS call with co counsel (.5); draft stip motion to extend deadlines (1.0); email | 2.2 |
| 6/16/20 | PJ | created correlation table of native files for co counsel (2.50); settlement call with Suko (.6) | 3.1 |
| 6/18/20 | PJ | draft LS notes | 1.1 |
| 6/22/20 | PJ | updated stip motion to extend with edits (.9); review DEFS' supp. production (1.5) | 2.4 |
| 6/23/20 | PJ | finalize stip motion and email to co counsel (.4); finish review of supp production (.6) | 1.0 |
| 6/24/20 | PJ | email co counsel re: supp prod (.3); file stip motion (.7); travel to Grandview for | 7.4 |
| 6/25/20 | PJ | travel to and from courthouse (1.2); settlement | 9.8 |
| 6/26/20 | PJ | travel to courthouse (.6); settlement conference (11.2); travel back to Eugene (5.1) | 16.9 |

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| 6/30/20 | PJ | start drafting Consent Decree | 2.4 |
| 7/1/20 | PJ | draft CD | 4.2 |
| 7/2/20 | PJ | finish drafting CD | 1.8 |
| 7/6/20 | PJ | edits to CD (.7); email Erickson re: CD (.2) | 0.9 |
| 7/9/20 | PJ | review email re: abandon lagoon sampling | 0.4 |
| 7/10/20 | PJ | email correspondences with opp. counsel (.7); call DJE re: sampling locations (.2); | 2.4 |
| 7/13/20 | PJ | emails to opp counsel (.8); call DJE (.2); | 1.9 |
| 7/14/20 | PJ | email JH | 0.2 |
| 8/4/20 | PJ | read and rev'd DEFS' edits to CD | 1.7 |
| 8/12/20 | PJ | disc settlement w/ CT | 0.2 |
| 8/14/20 | PJ | email opposing counsel | 0.2 |
| 8/17/20 | PJ | draft notes in prep for call (.5); call with | 1.0 |
| 8/25/20 | PJ | edits to CD | 2.0 |
| 9/14/20 | PJ | email re: CD Communication (.2); read/rev'd DBD CD comment response (1.6); call with | 2.5 |
| 9/17/20 | PJ | edits to DBD response letter | 1.2 |
| 9/21/20 | PJ | begin drafting in camera letter (3.9); prepare:document package for Suko (2.4) | 6.3 |
| 9/22/20 | PJ | finish drafting in camera letter (4.8); research WA Cert labs for sampling (.6) | 5.4 |
| 9/23/20 | PJ | edit and finalize to in camera letter | 2.1 |
| 9/24/20 | PJ | prep for settlement conference | 2.0 |
| 9/25/20 | PJ | finish preparing for settlement conference | 0.7 |
| 9/28/20 | PJ | travel to Yakima for settlement meeting | 5.2 |
| 9/29/20 | PJ | settlement conf (7.2); travel to Eugene (5.1) | 12.3 |
| 10/7/20 | PJ | draft stip motion to extend | 0.9 |
| 10/9/20 | PJ | review well date for up/downgradient homes | 1.6 |
| 10/12/20 | PJ | finalize and file stip motion to extend (1.1); LS call with DS, CT (.4); review R34 data to | 3.1 |
| 10/13/20 | PJ | review discovery for missing documents (2.2); LS call with DS, CT (.8); compile | 6.0 |
| 10/14/20 | PJ | LS call with DS (.3); draft notes for R37 outstanding issue letter (1.7); LS call with DS, CT (.8); research real estate property and | 7.4 |
| 10/15/20 | PJ | draft updated sections for am complaint (4.0); submit PPR to ecology for 2020 records (.3) | 4.5 |
| 10/16/20 | PJ | research standee information and data | 1.8 |
| 10/19/20 | PJ | email DE re: R34 data | 0.2 |
| 10/20/20 | PJ | email client | 0.3 |
| 10/21/20 | PJ | review public records received from WSDA | 1.2 |
| 10/22/20 | PJ | research Motions to Compel Discovery (1.3); | 1.5 |

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| 10/23/20 | PJ | email MR field data (.4); Research caselaw re: R30 depositions (1.1); LS call with DS, CT (.4); | 3.4 |
| 10/26/20 | PJ | rev'd and start compiling data for expert reports (1.5); research Wayne Cummings | 3.5 |
| 10/27/20 | PJ | Research records from DeRuyter Bros. ownership (1.5); identify missing soil data from discovery reqs (1.3); discovery call | 3.6 |
| 10/28/20 | PJ | update soil nutrient level charts (.6); draft discovery call follow up letter (2.3); review application field data for missing timespans | 6.8 |
| 10/29/20 | PJ | review and draft notes on export records/truck driver employees (2.5); edits to discovery follow up letter (.4); finalize | 3.8 |
| 11/2/20 | PJ | Call with CT (.3); deposition legal strategy | 3.1 |
| 11/3/20 | PJ | start SMD document review and prep for depositions (1.1); DEPO LS call with CT, DS (.6); prepare: notes on missing info on LLCs (1.2); research Fre:609 standards in 9th cir (1.1); | 7.4 |
| 11/4/20 | PJ | edit Protective Order (.7); review and make notes on DBD documents for Depositions (3.7); start drafting notes for Glessner depo outline | 9.0 |
| 11/5/20 | PJ | research R30 caselaw (1.9); final edits to Judge Rice discovery dispute position paper | 6.4 |
| 11/6/20 | PJ | prepare: for hearing (.5); hearing with Judge Rice (.3); debrief with CT and DS (.3) | 1.1 |
| 11/9/20 | PJ | prepare: notes for Cummings Depo Outline (3.3); research caselaw for written depo | 5.0 |
| 11/10/20 | PJ | draft memo on written depositions (1.6); start drafting depo outline for Cummings (1.1) | 2.7 |
| 11/11/20 | PJ | conf call with Odell (.6); follow-up call with DS, CT (.2); review DBD permit conditions (1.0); start drafting follow-up letter re: | 4.3 |
| 11/12/20 | PJ | finish drafting and finalize follow up letter | 2.9 |
| 11/16/20 | PJ | rev'd email PRs installment (.6) | 0.6 |
| 11/18/20 | PJ | draft Depo Outline for Cummings (4.7) | 4.7 |
| 11/19/20 | PJ | call with Central Court R, CT (.3); rev'd/drafted notes and questions re: Dry Creek Dairies and Idaho LLCs for depositions | 3.3 |
| 11/20/20 | PJ | Call with CT re: status (.2) | 0.2 |
| 11/22/20 | PJ | rev'd DEFS Nov. 20 Supp Productions (2.1); draft notes re: deficiencies of production (1.2) | 3.3 |

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| 11/23/20 | PJ | rev'd DEFS Sec. Supp Response to Rogs/RFP and made notes on deficiencies (1.4); compare:Fall 2020 soil test results to | 5.0 |
| 11/30/20 | PJ | draft follow up letter on discovery violations; | 2.8 |
| 12/1/20 | PJ | finalize discovery violation letter (.4); draft updated notices/subs for Glessner and Cummings Depos (.7); research FRCP 30 | 4.8 |
| 12/2/20 | PJ | call with opposing counsel (1.0); draft questions/update outline for Glessner Depo | 7.5 |
| 12/3/20 | PJ | Glessner deposition prep | 8.3 |
| 12/4/20 | PJ | prep for Glessner depo (.5); Deposition of John Glessner (5.5); LS call with DS, CT (.9) | 6.9 |
| 12/5/20 | PJ | update outline/draft questions for Cummings | 2.0 |
| 12/6/20 | PJ | prep for Cummings depo (5.7) | 5.7 |
| 12/7/20 | PJ | prep for Cummings depo (1.1); deposition of | 4.6 |
| 12/8/20 | PJ | Start drafting 3rd Supp NOI (1.7); start drafting confidentiality challenge letter (1.6) | 3.3 |
| 12/9/20 | PJ | finish drafting confidentiality challenge letter | 2.4 |
| 12/10/20 | PJ | finalize and serve conf challenge lettr (.4); | 4.3 |
| 12/11/20 | PJ | draft discovery plan (1.2) | 1.2 |
| 12/14/20 | PJ | finish drafting discovery plan (1.1) | 1.1 |
| 12/15/20 | PJ | read and highlighted/made notes on Glessner Depo transcript (2.2); call with CT (.2) | 2.4 |
| 12/16/20 | PJ | Call with CT and DS re: discovery | 0.3 |
| 12/17/20 | PJ | research "piercing the corporate veil" | 1.2 |
| 12/21/20 | PJ | rev'd and made notes on Cummings transcript (2.3); prepare:outline on Cummings/Glessner | 3.6 |
| 12/22/20 | PJ | finish editing and updating 3rd supp NOI | 3.0 |
| 12/23/20 | PJ | draft depo notices for Daniel and Karina | 0.8 |
| 12/24/20 | PJ | email Odell 3rd NOI (.3); finish and serve | 1.2 |
| 12/28/20 | PJ | start preparing fertility/nutrient spreadsheet | 2.1 |
| 12/30/20 | PJ | review and compile application data for | 3.2 |
| 1/4/20 | PJ | work on nutrient data for exp. Report (1.5); draft and email expert agreement for MR (.6) | 2.1 |
| 1/5/20 | PJ | LS call with CT, DS (.9); draft depo notice for | 2.3 |
| 1/6/20 | PJ | finish drafting and serve SS depo Notice (.5); draft confidentiality follow-up email and serve | 1.2 |
| 1/7/20 | PJ | rev'd letter and documents produced (.4); LS call with CT, DS (.5); call with public health expert (1.2); email Keene PH report template | 3.9 |

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| 1/8/20 | PJ | finalize G. DeRuyter subpoena and serve (1.0); draft outline for public health expert (1.1); work on amended complaint (.9); call | 4.7 |
| 1/11/20 | PJ | rev'd real estate records for GD depo (1.6); work on notes for motion to add (1.5); draft | 3.8 |
| 1/12/20 | PJ | LS call with DS. CT (.7); update G. DeRuyter sub and serve (.7); edit DeCoster Ent. Sub (.8); start drafting MR expert report | 5.0 |
| 1/13/20 | PJ | email opp counsel notice of G DeRuyter service (.2); work on MR expert report (1.3); research Larry Shuler (.6); hearing with Judge | 3.0 |
| 1/14/20 | PJ | email MR re: expert report (.2); research Maine sub servers (.3); draft J.DeCoster | 1.4 |
| 1/20/20 | PJ | M/C with opp counsel (.8) | 0.8 |
| 1/27/20 | PJ | deposition of G DeRuyter | 1.5 |
| 1/29/20 | PJ | work on supp. 26(a)(1) production | 1.6 |
| 2/1/21 | PJ | work on supp. 26(a)(1) production (2.2); start | 2.9 |
| 2/2/21 | PJ | draft RFAs (1.3); work on Motion to Compel | 2.9 |
| 2/3/21 | PJ | finish CT Decl for Motion to Compel | 1.7 |
| 2/4/21 | PJ | draft 2nd. Rogs/RFPs and 1st RFAs (3.7); | 3.9 |
| 2/9/21 | PJ | LS call with CT, DS (.5); work on 2nd | 3.9 |
| 2/10/21 | PJ | rev'd Defs' production batch (.8); LS call with CT, DS (.4); rev'd Glessner Depo corrections (.8); Rev'd G DeRuyter transcript (.7); Call | 5.6 |
| 2/11/21 | PJ | research DeCoster's associates (1.4); research caselaw on relevance of financial information (1.0); finalize and email discovery letter (.3); Rev'd Glessner/Cummings depo transcripts | 4.1 |
| 2/12/21 | PJ | finalize 2nd Rogs/RFPs, 1st RFAs (3.1); | 3.3 |
| 2/17/21 | PJ | edit position paper for disc. Hearing (.9); | 1.1 |
| 2/18/21 | PJ | LS calls with DS,CT (.4); edit/finalize | 4.2 |
| 2/22/21 | PJ | draft response position paper | 3.9 |
| 2/23/21 | PJ | edit, finalize and serve PP response (.8) | 0.8 |
| 2/24/21 | PJ | hearing with Judge Rice (.3); LS call with DS, CT (.3); email clients update on disc hearing | 1.7 |
| 2/25/21 | PJ | Call with DS, CT | 0.4 |
| 3/4/21 | PJ | Call with opp counsel (.5); LS call with DS, CT (.4); review R45 Motion to compel | 3.7 |
| 3/5/21 | PJ | LS call with DS, CT (.3); Update SDT for | |
| 3/9/21 | PJ | Batch 20 review | 0.6 |
| 3/10/21 | PJ | email re: Decoster memo (.2); call with Steiner (.4); Call with Opp Counsel (.7); call with CT | 1.5 |
| 3/11/21 | PJ | Call w/ CT and DS | 0.2 |

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| 3/18/21 | PJ | Call with opp counsel | 0.3 |
| 4/15/21 | PJ | Call with JK re: closure | 0.3 |
| 4/23/21 | PJ | rev'd closure:document from Farallon; call with JK, Farallon (1.5); call with CT, DE (.2) | 0.9 |
| 4/26/21 | PJ | Call with JK re: closure | 0.4 |
| 5/3/21 | PJ | rev'd stipulation on int. fees (.6); call with CT | 0.7 |
| 5/7/21 | PJ | Confer with CT re:site visit (.2) | 0.2 |
| 5/11/21 | PJ | Call with CT and DS | 0.4 |
| 5/12/21 | PJ | travel from Eugene to Sunnyside (1/3) | 2.0 |
| 5/13/21 | PJ | site inspection | 3.0 |
| 5/14/21 | PJ | travel from Sunnyside to Eugene | 2.0 |
| 5/17/21 | PJ | draft closure:plan memo for DBD | 1.9 |
| 5/18/21 | PJ | draft closure:memo (1.5); compile exhibits for | 2.4 |
| 5/24/21 | PJ | email correspondence with opp counsel | 0.3 |
| 6/21/21 | PJ | rev'd SOW for GW wells (.5); call with CT | 0.7 |
| 6/25/21 | PJ | draft email to clients on recent developments (.5); call with Erickson re: GW wells (.3) | 0.8 |
| 6/28/21 | PJ | Review data from Defs' production | 0.7 |
| 6/29/21 | PJ | email JK re: spring soil samples (.2); call with Jean (.8); call with CT and DS re:status (.2) | 1.2 |
| 6/30/21 | PJ | create map overlaying recent GW data with | 1.9 |
| 7/21/21 | PJ | initial sit inv data review | 1.7 |
| 7/22/21 | PJ | email clients | 0.5 |
| 7/23/21 | PJ | call with DE, CT | 0.3 |
| 7/30/21 | PJ | review field notes | 0.7 |
| 8/4/21 | PJ | subsurface investigation call (1.0); call with | 1.3 |
| 8/9/21 | PJ | work on analyzing subsurface data | 2.7 |
| 8/23/21 | PJ | work on drafting consent decree (2.7); call with DE (.7); start drafting response letter to | 4.6 |
| 8/24/21 | PJ | draft response letter (2.0); call with CT (.2) | 2.2 |
| 8/25/21 | PJ | finish response letter | 1.0 |
| 9/1/21 | PJ | call with DE, CT | 0.4 |
| 9/13/21 | PJ | work on scheduling | 0.4 |
| 9/15/21 | PJ | Scheduling conf (.6); calendar new date (.4) | 1.0 |
| 9/16/21 | PJ | LS call with DS (.3); draft subs for DeCoster | 1.0 |
| 9/20/21 | PJ | LS call with DS, CT (.2); work on response to Rogs (3.3); finish DeCoster subs (1.5) | 5.0 |
| 9/21/21 | PJ | call with Reddout (.5); work on response to | 5.0 |
| 9/22/21 | PJ | locate Reddout well data (.6); work on supp | 2.1 |
| 9/23/21 | PJ | call with Reddout (.5); Update response to Rog (.4); status call with CT and DS (.2) | 1.1 |
| 9/27/21 | PJ | review and draft comments on search terms | 1.0 |

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| 9/28/21 | PJ | finish review of search terms | 1.7 |
| 9/29/21 | PJ | work on response to rogs (.7) | 0.7 |
| 10/8/21 | PJ | review DBD doc production; confer with CT | 6.0 |
| 10/10/21 | PJ | work on response to rogs | 3.2 |
| 10/11/21 | PJ | search term response edits ; work on response | 2.1 |
| 10/12/21 | PJ | work on doc production (3.5); confer with CT | 3.7 |
| 10/13/21 | PJ | finalize and serve response to rogs (2.1); correspondence with clients re: rogs (.9) | 3.0 |
| 10/14/21 | PJ | start reviewing doc production files | 5.0 |
| 10/15/21 | PJ | review doc production (2.6); draft notes for | 4.6 |
| 10/18/21 | PJ | drafting FAC | 3.0 |
| 10/19/21 | PJ | edit FAC | 0.9 |
| 10/20/21 | PJ | edit FAC | 1.0 |
| 10/27/21 | PJ | review production files (1.5); call with opp counsel (1.0); confer with CT and DS (.2) | 1.7 |
| 10/28/21 | PJ | review search term revision proposal (1.4); | 1.9 |
| 10/29/21 | PJ | review recent RCRA order from 9th | 0.7 |
| 11/2/21 | PJ | update edits to Stip Mot | 0.5 |
| 11/3/21 | PJ | edit Confidentiality letter; call with CT and DS | 0.8 |
| 11/5/21 | PJ | update FAC with comments | 3.5 |
| 11/8/21 | PJ | edit and finalize FAC (5.5); finalize stip motion (1.5); file motion and FAC (1.0) | 8.0 |
| 11/9/21 | PJ | rev'd missing discovery for letter (1.5); LS call with DS, CT (.3); email opp counsel (.3); | 2.4 |
| 11/15/21 | PJ | rev'd production file 30 (2.3); call with CT | 2.5 |
| 11/16/21 | PJ | finish rev'd file 30 | 2.5 |
| 11/17/21 | PJ | email JK (.2); create soil chart with 2021 soi | 2.2 |
| 11/22/21 | PJ | research waiver of serv rules | 1.0 |
| 11/23/21 | PJ | draft POS/Decl.; call with CT re:service (.2) | 3.8 |
| 11/24/21 | PJ | email opp counsel | 0.3 |
| 11/29/21 | PJ | amended DeCoster depo notice (1.1); confer | 1.1 |
| 12/6/21 | PJ | Rev'd discovery file 32 | 1.1 |
| 12/7/21 | PJ | research DeCoster Ent. email | 2.7 |
| 12/8/21 | PJ | rev'd GDS DT docs for JD Depo | 1.4 |
| 12/9/21 | PJ | review def's discovery productions for JD | 6.1 |
| 12/10/21 | PJ | rev'd discovery file 33 (2.7); rev'd DeCoster Enterprises SDT production (.9) | 3.8 |
| 12/13/21 | PJ | Call with CT re:discovery | 0.2 |
| 12/14/21 | PJ | draft Glessner Sub for phone records | 1.1 |
| 12/15/21 | PJ | start drafting JD depo outline (6.0) | 6.0 |
| 12/16/21 | PJ | work on drafting JD depo outline | 3.5 |
| 12/17/21 | PJ | work on drafting JD depo outline | 4.9 |

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| 12/20/21 | PJ | rev'd discovery file 34 (.5); review DeCoster Ent SDT supp prod (.6); work on DeCoster | 2.3 |
| 12/21/21 | PJ | put together exhibit files for depo | 3.4 |
| 12/22/21 | PJ | JD Depo; confer re:same with CT and DS (.2) | 5.7 |
| 12/23/21 | PJ | rev'd DBD file 35 (.8); JD Depo (1.9) | 2.7 |
| 1/3/22 | PJ | rev'd recent batch of production (1.3); rev'd and drafted notes on DEFS' MTDs (4.2) | 5.5 |
| 1/4/22 | PJ | start drafting response to WAI MTD (2.9); start drafting response to NON WA MTD | 7.0 |
| 1/5/22 | PJ | work on response to WA MTD | 4.7 |
| 1/6/22 | PJ | caselaw research on "alter ego" for juris (5.5); draft notes on confidential exs for responses | 6.9 |
| 1/7/22 | PJ | work on WA MTD (3.0); work on drafting | 5.2 |
| 1/9/22 | PJ | finish drafting WA MTD response (4.0); work on NON WA MTD response (2.0) | 6.0 |
| 1/10/22 | PJ | finish drafting NON WA MTD response (6.0)l research owner/parent liability caselaw | 9.0 |
| 1/11/22 | PJ | work on edits to NON WA MTD response (2.9); start drafting CT decl. (.8); research caselaw cites for incorporation by reference | 7.0 |
| 1/12/22 | PJ | draft CT decl and work on exs (3.9); edit | 8.4 |
| 1/13/22 | PJ | finalize CT decl and finalize sealed exs (4.4); hardcopy edits to NON WA/WA responses | 8.3 |
| 1/19/22 | PJ | draft CT decl iso motion to unseal (4.4); Edit Mtn to Expedite (1.0); call with CT (.2) | 5.6 |
| 1/20/22 | PJ | edits to motion to unseal (3.0); edit to motion | 4.0 |
| 1/24/22 | PJ | Call with CT and DS re: discovery | 0.2 |
| 1/31/22 | PJ | work on ER 904 spreadsheet (5.5); call with | 5.7 |
| 2/2/22 | PJ | Folder 40 doc review | 2.2 |
| 2/4/22 | PJ | work on drafting reply ISO MTn to | 3.2 |
| 2/7/22 | PJ | rev'd orders denying MTD (.8); draft email memo to clients re: order (.5); call with CT | 1.6 |
| 2/8/22 | PJ | call with CT and DS re: discovery | 0.2 |
| 2/9/22 | PJ | research caselaw re: purposeful direction for | 2.0 |
| 2/11/22 | PJ | rev'd doc folder 42 | 2.0 |
| 2/14/22 | PJ | FINISH REVIEWING DISCOVERY | 6.4 |
| 2/16/22 | PJ | call with DS, CT (.3); call with opposing | 0.9 |
| 2/17/22 | PJ | draft notes on missing discovery for R37 letter (1.9); work on potential ROGS/RFPs re: | 5.5 |
| 2/18/22 | PJ | Review DBD PL and redaction for R37 letter | 3.4 |
| 2/24/22 | PJ | settlement call with opp counsel and experts (1.8); follow up call with DS, CT (.2) | 2.0 |

| | | | |
|--------------|----|--|----------------|
| 3/4/22 | PJ | Call with CT and DS re:status | 0.1 |
| 3/15/22 | PJ | draft email to DS re: outstanding discovery | 1.0 |
| 3/23/22 | PJ | call with CT and DS re:next steps | 0.2 |
| 4/14/22 | PJ | rev'd DEFS settlement proposal | 0.6 |
| 4/21/22 | PJ | work on response to DBD proposal (2.0); call with DS, CT re: settlement (1.0) | 3.0 |
| 4/22/22 | PJ | settlement call | 0.4 |
| 4/25/22 | PJ | work on settlement proposal/ID AOCs (1.5); | 1.7 |
| 4/26/22 | PJ | finish reviewing file 44 | 3.5 |
| 4/27/22 | PJ | research Ecology well database (1.3) | 1.3 |
| 5/20/22 | PJ | rev'd Glessner emails | 1.0 |
| 6/6/22 | PJ | rev'd settlement spreadsheet (.9); start drafting | 4.0 |
| 6/7/22 | PJ | draft Consent Decree (2.0); call with Glessner | 2.3 |
| 6/8/22 | PJ | call with DJE re: CD (.5); email follow up with DJE (.3); confer with CT re:status (.2) | 1.0 |
| 6/20/22 | PJ | rev'd client comments on draft CD and confer | 1.0 |
| 6/21/22 | PJ | work on Consent Decree Exhibits | 1.9 |
| 6/23/22 | PJ | call with DJE re: CD; LS call with DS, CT | 0.8 |
| 6/27/22 | PJ | call with JG, CT re: CD | 0.4 |
| 6/28/22 | PJ | work on CD Exs | 1.1 |
| 6/29/22 | PJ | call with DJE re: Exs | 0.3 |
| 6/30/22 | PJ | rev'd conf/408 docs (1.9); draft remediation proposal letter (2.1); confer with CT re:CD | 4.2 |
| 7/6/22 | PJ | call with CT and DS re:next steps | 0.2 |
| 7/11/22 | PJ | review CD edits from DBD | 2.1 |
| 7/12/22 | PJ | zoom with DJE re: CD edits | 0.7 |
| 7/13/22 | PJ | call with DS, CT re: CD | 0.3 |
| 7/18/22 | PJ | research WA GW regs re: remediation withdrawals (1.5); call with CT re:pilot project | 1.7 |
| 7/19/22 | PJ | research WA GW regs re: remediation | 4.0 |
| 7/20/22 | PJ | start drafting memo re: remediation GW rights | 1.2 |
| 7/21/22 | PJ | drafting memo re: GW remediation rights | 2.5 |
| 7/25/22 | PJ | call with BM re: CD (.5); call with CT | 0.7 |
| 8/2/22 | PJ | make edits to draft CD | 1.2 |
| 8/12/22 | PJ | make edits to CD (1.7); call with CT re:same | 1.9 |
| 8/15/22 | PJ | make edits to CD | 2.1 |
| 8/16/22 | PJ | call with CT re:CD | 0.2 |
| 8/22/22 | PJ | review expert proposed SOW for CD RI (.9); | 1.1 |
| 9/20/22 | PJ | Call with CT and DE re:work plan | 0.2 |
| 9/28/22 | PJ | call with CT and DS re:next steps | 0.2 |
| Total | | | 1,034.3 |

| Date | Staff | LOCMT fees | Time |
|--------------|--------------|--|-------------|
| 5/15/23 | MT | comple costs summary through April, begin to assemble timesheets | 2.1 |
| 5/16/23 | MT | update WET invoice tally | 1.2 |
| 5/23/23 | MT | compile final expert bills, AR | 0.9 |
| 6/5/23 | MT | compile MR & CFS | 0.9 |
| 6/23/23 | MT | compile TM fees & costs | 0.8 |
| 6/24/23 | MT | compile final costs, cross check details, begin final accounting | 2.4 |
| 6/25/23 | MT | work on final accounting, assemble pdf | 1.5 |
| 9/13/23 | MT | compile LOCMT time and costs since 6/23; update expert documentation; call w/team re same | 2.0 |
| Total | | | 11.8 |

Law Offices of Andrea K. Rodgers

3026 NW Esplanade, Seattle, WA 98117

T: (206) 696-2851

Email: andrearodgers42@gmail.com

| Date | Atty | Task | Hrs | Rate | Total |
|----------|------|--|-----|-------|------------|
| 5/21/19 | AR | Rev. and edit Complaint | 2.2 | \$590 | \$1,298.00 |
| 5/4/20 | AR | Rev. & edit Plaintiffs' Rule 34 position paper | 0.4 | \$590 | \$236.00 |
| 5/6/20 | AR | Rev. & edit Plaintiffs' reply on Rule 34 position paper | 0.2 | \$590 | \$118.00 |
| 5/7/20 | AR | Rev. order granting Rule 34 site visit | 0.1 | \$590 | \$59.00 |
| 11/5/20 | AR | Rev. Defendants' correspondence re: informal discovery hearing | 0.2 | \$590 | \$118.00 |
| 11/9/20 | AR | Rev. correspondence re: Glessner deposition | 0.1 | \$590 | \$59.00 |
| 11/16/20 | AR | Rev. Defendants' stip mtn for protective order | 0.1 | \$590 | \$59.00 |
| 11/23/20 | AR | Rev. meet and confer letter re: Defendants' discovery responses | 0.2 | \$590 | \$118.00 |
| 11/23/20 | AR | Rev. and edit letter to Defendants re: Notice of Violation of Court Order | 0.2 | \$590 | \$118.00 |
| 12/3/20 | AR | Rev. unconditional guaranty of payment and confer w/ co-counsel re: same | 0.2 | \$590 | \$118.00 |
| 1/5/21 | AR | Rev. correspondence re: follow up from depositions | 0.1 | \$590 | \$59.00 |
| 3/11/21 | AR | Rev. correspondence from FOTC re: case status | 0.1 | \$590 | \$59.00 |
| 3/11/21 | AR | Rev. correspondence from CT re: DBD, SMD plans to cease dairy operations | 0.1 | \$590 | \$59.00 |
| 4/27/21 | AR | Rev. correspondence from FOTC re: stay of litigation | 0.2 | \$590 | \$118.00 |
| 4/27/21 | AR | Rev. draft stipulated motion to stay | 0.2 | \$590 | \$118.00 |
| 5/27/21 | AR | Rev. and edit interim fee agreement | 0.3 | \$590 | \$177.00 |
| 7/6/21 | AR | Rev. Court order granting stay | 0.1 | \$590 | \$59.00 |
| 9/1/21 | AR | Rev. correspondence w/ court re: request for status conference | 0.1 | \$590 | \$59.00 |
| 10/7/21 | AR | Rev. letter from Jeff Cray re: pending discovery issues | 0.1 | \$590 | \$59.00 |
| 10/10/21 | AR | Rev. and edit Plaintiffs' Responses to Defendants' First Set of ROGs, RFPs | 0.4 | \$590 | \$236.00 |
| 11/8/21 | AR | Rev. motion to amend scheduling order | 0.1 | \$590 | \$59.00 |
| 12/3/21 | AR | Rev. Notice of Withdrawal & Sub. Of Counsel, court order re: same | 0.1 | \$590 | \$59.00 |
| 12/18/21 | AR | Rev. Defendants' Motion to Dismiss Plaintiffs' Second Claim for Relief | 0.4 | \$590 | \$236.00 |
| 1/10/22 | AR | Rev. and edit Plaintiffs' Response to Defendants' Motion to Dismiss | 0.8 | \$590 | \$472.00 |
| 1/19/22 | AR | Rev. and Edit Plaintiffs' Motion to Unseal Documents | 0.2 | \$590 | \$118.00 |
| 1/24/22 | AR | Rev. briefing re: motion to expedite | 0.3 | \$590 | \$177.00 |
| 2/3/22 | AR | Oral Argument on MTD | 0.4 | \$590 | \$236.00 |
| 2/7/22 | AR | Rev. Court's order denying Defendants' MTD and granting in part Plaintiffs' Motion to Unseal | 0.3 | \$590 | \$177.00 |
| 2/27/22 | AR | Rev. Defendants' Answer to Complaint | 0.2 | \$590 | \$118.00 |
| 6/17/22 | AR | Rev. and edit draft consent decree | 0.4 | \$590 | \$236.00 |
| 6/30/22 | AR | Rev. Court's Sixth Amended bench trial scheduling order | 0.1 | \$590 | \$59.00 |
| 8/3/22 | AR | Rev. court order granting motion to stay | 0.1 | \$590 | \$59.00 |
| 10/31/22 | AR | Rev. status report | 0.1 | \$590 | \$59.00 |

| | | | | | |
|--------------|----|--|-------------|-------|-------------------|
| 12/8/22 | AR | Rev. Seventh Amended Scheduling Order | 0.1 | \$590 | \$59.00 |
| 1/20/23 | AR | Rev. correspondence re: 30(b)(6) notice of deposition for Non-WA Defendants and DeCoster Enterprises | 0.1 | \$590 | \$59.00 |
| 2/1/23 | AR | Rev. Court's notice of hearing re: discovery | 0.1 | \$590 | \$59.00 |
| 3/8/23 | AR | Rev. Nachman expert report | 0.3 | \$590 | \$177.00 |
| 3/8/23 | AR | Rev. Russelle expert report | 0.4 | \$590 | \$236.00 |
| 3/8/23 | AR | Rev. Erickson expert report | 0.3 | \$590 | \$177.00 |
| 3/16/23 | AR | Rev. correspondence re: discovery | 0.1 | \$590 | \$59.00 |
| 4/19/23 | AR | Rev. draft consent decree | 1.7 | \$590 | \$1,003.00 |
| 5/1/23 | AR | Rev. court order granting in part and denying in part Plaintiffs' motion to compel | 0.3 | \$590 | \$177.00 |
| TOTAL | | | 12.5 | | \$7,375.00 |

Exhibit 2 – Fees Incurred by David J. Erickson/WET



480 East Park Street | Butte, Montana 59701

Charles Tebbutt
941 Lawrence Street
Eugene, OR 97401

January 13, 2020
Project No: 2018.0088
Invoice No: 1214

Project 2018.0088 SMD/DBD Dairy
Professional Services from December 1, 2019 to December 31, 2019

Professional Personnel

| | Hours | Rate | Amount | |
|--------------------|--------------|--------|-----------------|-----------------|
| Principal | | | | |
| Erickson, David | 33.50 | 200.00 | 6,700.00 | |
| Project II | | | | |
| Frazee, Stephen | 4.25 | 120.00 | 510.00 | |
| GIS Manager | | | | |
| LeProwse, Jeff | 3.00 | 120.00 | 360.00 | |
| Totals | 40.75 | | 7,570.00 | |
| Total Labor | | | | 7,570.00 |

Unit Billing

| | | | | |
|--------------------|---------------------------|--|---------------|-------------------|
| Mileage | | | | |
| #rental car | 1,198.0 Miles @ 0.80 | | 958.40 | |
| Total Units | | | 958.40 | 958.40 |
| | Total this Invoice | | | \$8,528.40 |

REMIT TO: WATER & ENVIRONMENTAL TECHNOLOGIES 480 E PARK ST BUTTE MT 59701

Water and Environmental Technologies
 Invoice Summary

| Billing Client | Invoice | Invoice Date | Invoice Total |
|-----------------|---------|--------------|-------------------|
| Charles Tebbutt | 1214 | 1/13/2020 | 8,528.40 |
| Charles Tebbutt | 1758 | 5/14/2020 | 10,505.00 |
| Charles Tebbutt | 1913 | 6/24/2020 | 65,643.15 |
| Charles Tebbutt | 2395 | 10/9/2020 | 5,040.00 |
| Charles Tebbutt | 2869 | 1/28/2021 | 1,840.00 |
| Charles Tebbutt | 4207 | 7/19/2021 | 17,974.88 |
| Charles Tebbutt | 4208 | 8/23/2021 | 7,630.97 |
| Charles Tebbutt | 5956 | 7/6/2022 | 9,733.29 |
| Charles Tebbutt | 6195 | 8/9/2022 | 11,912.50 |
| Charles Tebbutt | 6671 | 10/12/2022 | 14,606.25 |
| Charles Tebbutt | 6978 | 11/15/2022 | 18,575.52 |
| Charles Tebbutt | 7547 | 2/10/2023 | 10,101.61 |
| Charles Tebbutt | 7720 | 3/8/2023 | 13,150.00 |
| Charles Tebbutt | 7994 | 5/2/2023 | 26,547.50 |
| | | | <u>221,789.07</u> |

| | | | | |
|---------|-----------|-----------------------|---------|------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 1214 |
|---------|-----------|-----------------------|---------|------|

Billing Backup

Monday, January 13, 2020

Water & Environmental Technologies,
Inc.

Invoice 1214 Dated 1/13/2020

12:46:24 PM

| | | |
|---------|-----------|---------------|
| Project | 2018.0088 | SMD/DBD Dairy |
|---------|-----------|---------------|

Professional Personnel

| | | | Hours | Rate | Amount | |
|--------------------|---|------------|--------------|--------|-----------------|-----------------|
| Principal | | | | | | |
| 0001 | Erickson, David | 11/5/2019 | 2.00 | 200.00 | 400.00 | |
| | GWMP | | | | | |
| 0001 | Erickson, David | 11/6/2019 | 1.00 | 200.00 | 200.00 | |
| | GWMP | | | | | |
| 0001 | Erickson, David | 11/14/2019 | 2.50 | 200.00 | 500.00 | |
| | 2 calls and data review | | | | | |
| 0001 | Erickson, David | 11/18/2019 | 1.50 | 200.00 | 300.00 | |
| | Call and review | | | | | |
| 0001 | Erickson, David | 11/19/2019 | .50 | 200.00 | 100.00 | |
| | Topo Survey | | | | | |
| 0001 | Erickson, David | 11/21/2019 | .50 | 200.00 | 100.00 | |
| | Final Topo | | | | | |
| 0001 | Erickson, David | 12/3/2019 | 9.00 | 200.00 | 1,800.00 | |
| | Travel | | | | | |
| 0001 | Erickson, David | 12/4/2019 | 16.00 | 200.00 | 3,200.00 | |
| | CD Negotiation, Travel Home | | | | | |
| 0001 | Erickson, David | 12/10/2019 | .50 | 200.00 | 100.00 | |
| | Liner costs | | | | | |
| Project II | | | | | | |
| 0049 | Frazee, Stephen | 11/5/2019 | .75 | 120.00 | 90.00 | |
| | drone provider research | | | | | |
| 0049 | Frazee, Stephen | 11/8/2019 | .75 | 120.00 | 90.00 | |
| | call w/ drone service provider | | | | | |
| 0049 | Frazee, Stephen | 11/14/2019 | .25 | 120.00 | 30.00 | |
| | checking in w/ Drone company to check on status of proposal | | | | | |
| 0049 | Frazee, Stephen | 11/19/2019 | .50 | 120.00 | 60.00 | |
| | uav cost estimate | | | | | |
| 0049 | Frazee, Stephen | 11/21/2019 | 2.00 | 120.00 | 240.00 | |
| | Topo Map of Snipes Mtn | | | | | |
| GIS Manager | | | | | | |
| 0014 | LeProwse, Jeff | 11/5/2019 | 1.00 | 120.00 | 120.00 | |
| | DE maps | | | | | |
| 0014 | LeProwse, Jeff | 11/6/2019 | 2.00 | 120.00 | 240.00 | |
| | DE maps | | | | | |
| Totals | | | 40.75 | | 7,570.00 | |
| Total Labor | | | | | | 7,570.00 |

REMIT TO: WATER & ENVIRONMENTAL TECHNOLOGIES 480 E PARK ST BUTTE MT 59701

| | | | | |
|---------|-----------|-----------------------|---------|------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 1214 |
|---------|-----------|-----------------------|---------|------|

Unit Billing**Mileage**

| | | | |
|--------------------|---------------------------|---------------|-------------------|
| #rental car | 1,198.0 Miles @ 0.80 | 958.40 | |
| Total Units | | 958.40 | 958.40 |
| | Total this Project | | \$8,528.40 |
| | Total this Report | | \$8,528.40 |

REMIT TO: WATER & ENVIRONMENTAL TECHNOLOGIES 480 E PARK ST BUTTE MT 59701



480 East Park Street | Butte, Montana 59701

Charles Tebbutt
 941 Lawrence Street
 Eugene, OR 97401

May 14, 2020
 Project No: 2018.0088
 Invoice No: 1758

Project 2018.0088 SMD/DBD Dairy
Professional Services from March 28, 2020 to April 25, 2020
Professional Personnel

| | Hours | Rate | Amount | |
|----------------------------|-------|---------------------------|-----------|--------------------|
| Principal | | | | |
| Erickson, David | 16.50 | 200.00 | 3,300.00 | |
| Project II | | | | |
| Surratt, Laura | 32.00 | 120.00 | 3,840.00 | |
| Staff I | | | | |
| Holland, Marcus | 3.00 | 80.00 | 240.00 | |
| GIS Manager | | | | |
| LeProwse, Jeff | 17.00 | 120.00 | 2,040.00 | |
| Environmental Technician 1 | | | | |
| Carter, Dennis | 15.50 | 70.00 | 1,085.00 | |
| Totals | 84.00 | | 10,505.00 | |
| Total Labor | | | | 10,505.00 |
| | | Total this Invoice | | \$10,505.00 |

REMIT TO: WATER & ENVIRONMENTAL TECHNOLOGIES 480 E PARK ST BUTTE MT 59701

| | | | | |
|---------|-----------|-----------------------|---------|------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 1758 |
|---------|-----------|-----------------------|---------|------|

Billing Backup

Thursday, May 14, 2020

Water & Environmental Technologies, Inc.

Invoice 1758 Dated 5/14/2020

4:09:54 PM

| | | |
|---------|-----------|---------------|
| Project | 2018.0088 | SMD/DBD Dairy |
|---------|-----------|---------------|

Professional Personnel

| | | | Hours | Rate | Amount |
|------------|---|-----------|-------|--------|----------|
| Principal | | | | | |
| 0001 | Erickson, David | 2/14/2020 | .50 | 200.00 | 100.00 |
| | Settlement proposal review | | | | |
| 0001 | Erickson, David | 3/9/2020 | 1.50 | 200.00 | 300.00 |
| | SAP | | | | |
| 0001 | Erickson, David | 3/11/2020 | .50 | 200.00 | 100.00 |
| | SAP | | | | |
| 0001 | Erickson, David | 3/12/2020 | 1.00 | 200.00 | 200.00 |
| | SAP | | | | |
| 0001 | Erickson, David | 3/13/2020 | 1.25 | 200.00 | 250.00 |
| | SAP | | | | |
| 0001 | Erickson, David | 3/16/2020 | .25 | 200.00 | 50.00 |
| | QAPP discussion with LS | | | | |
| 0001 | Erickson, David | 3/17/2020 | .50 | 200.00 | 100.00 |
| | QAPP discussion with LS | | | | |
| 0001 | Erickson, David | 3/18/2020 | 1.50 | 200.00 | 300.00 |
| | QAPP Review | | | | |
| 0001 | Erickson, David | 3/31/2020 | 1.50 | 200.00 | 300.00 |
| | SAP Review. Modify figures | | | | |
| 0001 | Erickson, David | 4/1/2020 | 2.00 | 200.00 | 400.00 |
| | Review proposal, Call 1 with DBD/SMD, Call 2 with group | | | | |
| 0001 | Erickson, David | 4/6/2020 | 2.50 | 200.00 | 500.00 |
| | Qaap/Saap | | | | |
| 0001 | Erickson, David | 4/7/2020 | 1.50 | 200.00 | 300.00 |
| | QAPP Sap | | | | |
| 0001 | Erickson, David | 4/20/2020 | 1.00 | 200.00 | 200.00 |
| | Schedule | | | | |
| 0001 | Erickson, David | 4/23/2020 | 1.00 | 200.00 | 200.00 |
| | Schedule | | | | |
| Project II | | | | | |
| 0051 | Surratt, Laura | 3/11/2020 | 5.50 | 120.00 | 660.00 |
| | SAP/QAPP | | | | |
| 0051 | Surratt, Laura | 3/12/2020 | 4.75 | 120.00 | 570.00 |
| | SAP/QAPP | | | | |
| 0051 | Surratt, Laura | 3/13/2020 | 1.25 | 120.00 | 150.00 |
| | SAP/QAPP | | | | |
| 0051 | Surratt, Laura | 3/16/2020 | 7.00 | 120.00 | 840.00 |
| | SAP/QAPP | | | | |
| 0051 | Surratt, Laura | 3/17/2020 | 9.25 | 120.00 | 1,110.00 |
| | SAP/QAPP | | | | |

REMIT TO: WATER & ENVIRONMENTAL TECHNOLOGIES 480 E PARK ST BUTTE MT 59701

| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | | | Invoice | 1758 |
|----------------------------|--|-----------------------|-------|--------|-----------|--------------------|
| 0051 | Surratt, Laura figure edits | 3/18/2020 | .50 | 120.00 | 60.00 | |
| 0051 | Surratt, Laura misc | 3/27/2020 | .50 | 120.00 | 60.00 | |
| 0051 | Surratt, Laura maps | 4/1/2020 | .50 | 120.00 | 60.00 | |
| 0051 | Surratt, Laura maps | 4/2/2020 | .50 | 120.00 | 60.00 | |
| 0051 | Surratt, Laura maps | 4/3/2020 | 1.00 | 120.00 | 120.00 | |
| 0051 | Surratt, Laura SAP/QAPP | 4/7/2020 | 1.25 | 120.00 | 150.00 | |
| Staff I | | | | | | |
| 0074 | Holland, Marcus Reporting cleanup for LS | 3/14/2020 | 2.00 | 80.00 | 160.00 | |
| 0074 | Holland, Marcus SAP and QAPP updates for LS | 3/16/2020 | 1.00 | 80.00 | 80.00 | |
| GIS Manager | | | | | | |
| 0014 | LeProwse, Jeff LS/DE mapping | 3/13/2020 | 7.00 | 120.00 | 840.00 | |
| 0014 | LeProwse, Jeff ls maps | 3/17/2020 | 2.00 | 120.00 | 240.00 | |
| 0014 | LeProwse, Jeff LS Maps | 3/18/2020 | 2.00 | 120.00 | 240.00 | |
| 0014 | LeProwse, Jeff LS/DE maps | 4/2/2020 | 5.00 | 120.00 | 600.00 | |
| 0014 | LeProwse, Jeff DE maps | 4/7/2020 | 1.00 | 120.00 | 120.00 | |
| Environmental Technician 1 | | | | | | |
| 0115 | Carter, Dennis CAFO M010 well NOI research, Telecon with S Malone WDEcology | 4/9/2020 | 3.00 | 70.00 | 210.00 | |
| 0115 | Carter, Dennis CAFOM010 well locate /NOI Quarter Quarter development. Confirm Borings /Figs w L Suratt | 4/10/2020 | 5.00 | 70.00 | 350.00 | |
| 0115 | Carter, Dennis Develop Q/Q list and Criteria for boring NOI. Tele WDEC about water well reporting. email Steve N Dave E status /needs | 4/13/2020 | 5.00 | 70.00 | 350.00 | |
| 0115 | Carter, Dennis NOI submission and notification to Steve N | 4/17/2020 | 2.50 | 70.00 | 175.00 | |
| Totals | | | 84.00 | | 10,505.00 | |
| Total Labor | | | | | | 10,505.00 |
| Total this Project | | | | | | \$10,505.00 |
| Total this Report | | | | | | \$10,505.00 |

REMIT TO: WATER & ENVIRONMENTAL TECHNOLOGIES 480 E PARK ST BUTTE MT 59701



480 East Park Street | Butte, Montana 59701

Charles Tebbutt
941 Lawrence Street
Eugene, OR 97401

June 24, 2020
Project No: 2018.0088
Invoice No: 1913

Project 2018.0088 SMD/DBD Dairy
Professional Services from April 25, 2020 to June 20, 2020

Professional Personnel

| | Hours | Rate | Amount | |
|----------------------------|--------|--------|-----------|------------------|
| Principal | | | | |
| Erickson, David | 66.25 | 200.00 | 13,250.00 | |
| Senior III | | | | |
| Thomson, Patrick | 3.25 | 140.00 | 455.00 | |
| Senior II | | | | |
| Nicholls, Steven | 55.50 | 140.00 | 7,770.00 | |
| Staff I | | | | |
| Brooks, Loran | 18.00 | 80.00 | 1,440.00 | |
| Eggensperger, Christina | 70.25 | 80.00 | 5,620.00 | |
| GIS Manager | | | | |
| LeProwse, Jeff | 8.00 | 120.00 | 960.00 | |
| Environmental Technician 1 | | | | |
| Carter, Dennis | 3.00 | 70.00 | 210.00 | |
| Hadley, Rachel | 18.25 | 70.00 | 1,277.50 | |
| Totals | 242.50 | | 30,982.50 | |
| Total Labor | | | | 30,982.50 |

Reimbursable Expenses

| | | | | |
|----------------------------|--|--|------------------|------------------|
| Meals | | | 27.00 | |
| Laboratory Fees | | | 23,084.50 | |
| Licenses and Permits | | | 46.72 | |
| Misc Reimbursable Expenses | | | 5.00 | |
| Supplies | | | 1,225.03 | |
| Total Reimbursables | | | 24,388.25 | 24,388.25 |

Unit Billing

| | | | | |
|---------------------------|--|--|----------|--|
| 1" PVC - 5' Length | | | | |
| Consolidated posting | | | 84.00 | |
| 1" PVC Sreen - 5' Length | | | | |
| Consolidated posting | | | 198.00 | |
| 6600 Mileage (1 Operator) | | | | |
| | | | 2,827.50 | |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

To Pay by *Credit Card:

Copy and paste link app.clientpay.com/home/payment/#/paymentPage/15f4c16b-89f5-4de5-affb-08df1f0ecabf

To Pay by ACH: Contact accounting@waterenvtech.com to set up

*a 3% processing fee will be charged for all credit card payments

| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 1913 |
|----------------------------|-----------|---------------------------|------------------|--------------------|
| Bentonite | | | | |
| Consolidated posting | | | 178.50 | |
| Geoprobe 6600 (1 Operator) | | | | |
| Consolidated posting | | | 3,330.00 | |
| Mileage | | | | |
| 5/17/2020 | #114 | 1,222.0 Miles @ 0.80 | 977.60 | |
| 5/18/2020 | #105 | 1,109.0 Miles @ 0.80 | 887.20 | |
| 5/18/2020 | #119 | 1,237.0 Miles @ 0.80 | 989.60 | |
| Sample Liners (5' Core) | | | | |
| Consolidated posting | | | 800.00 | |
| Total Units | | | 10,272.40 | 10,272.40 |
| | | Total this Invoice | | \$65,643.15 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

To Pay by *Credit Card:

Copy and paste link app.clientpay.com/home/payment/#/paymentPage/15f4c16b-89f5-4de5-affb-08df1f0ecabf

To Pay by ACH: Contact accounting@waterenvtech.com to set up

*a 3% processing fee will be charged for all credit card payments

| | | | | |
|---------|-----------|-----------------------|---------|------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 1913 |
|---------|-----------|-----------------------|---------|------|

Billing Backup

Wednesday, June 24, 2020

Water & Environmental Technologies, Inc.

Invoice 1913 Dated 6/24/2020

12:06:10 PM

| | | |
|---------|-----------|---------------|
| Project | 2018.0088 | SMD/DBD Dairy |
|---------|-----------|---------------|

Professional Personnel

| | | | Hours | Rate | Amount |
|-----------|---|-----------|-------|--------|----------|
| Principal | | | | | |
| 0001 | Erickson, David | 4/28/2020 | .50 | 200.00 | 100.00 |
| | Hasp & Schedule | | | | |
| 0001 | Erickson, David | 4/29/2020 | .75 | 200.00 | 150.00 |
| | Hasp & Schedule | | | | |
| 0001 | Erickson, David | 4/30/2020 | .50 | 200.00 | 100.00 |
| | Hasp & Schedule | | | | |
| 0001 | Erickson, David | 5/1/2020 | 1.25 | 200.00 | 250.00 |
| | PM & Hasp | | | | |
| 0001 | Erickson, David | 5/4/2020 | .75 | 200.00 | 150.00 |
| | Order sample containers and shuttles | | | | |
| 0001 | Erickson, David | 5/6/2020 | .50 | 200.00 | 100.00 |
| | Schedule | | | | |
| 0001 | Erickson, David | 5/7/2020 | .75 | 200.00 | 150.00 |
| | Emails concerning sampling | | | | |
| 0001 | Erickson, David | 5/8/2020 | .50 | 200.00 | 100.00 |
| | Conversation & Review Sampling | | | | |
| 0001 | Erickson, David | 5/12/2020 | 2.25 | 200.00 | 450.00 |
| | Conference call, Field discussion, Schedule and discuss with TD | | | | |
| 0001 | Erickson, David | 5/12/2020 | .75 | 200.00 | 150.00 |
| | Schedule and Eq order with TD | | | | |
| 0001 | Erickson, David | 5/13/2020 | .75 | 200.00 | 150.00 |
| | schedule with SN | | | | |
| 0001 | Erickson, David | 5/13/2020 | .75 | 200.00 | 150.00 |
| | Schedule & Discuss with SN | | | | |
| 0001 | Erickson, David | 5/14/2020 | .75 | 200.00 | 150.00 |
| | Schedule and discuss with CE | | | | |
| 0001 | Erickson, David | 5/14/2020 | .50 | 200.00 | 100.00 |
| | Discuss work, sample bottles, equipment | | | | |
| 0001 | Erickson, David | 5/15/2020 | 2.00 | 200.00 | 400.00 |
| | Planning | | | | |
| 0001 | Erickson, David | 5/17/2020 | 2.00 | 200.00 | 400.00 |
| | emails, planning | | | | |
| 0001 | Erickson, David | 5/18/2020 | 11.00 | 200.00 | 2,200.00 |
| | travel, load out & Meeting | | | | |
| 0001 | Erickson, David | 5/19/2020 | 11.00 | 200.00 | 2,200.00 |
| | on-sight investigation | | | | |
| 0001 | Erickson, David | 5/20/2020 | 11.00 | 200.00 | 2,200.00 |
| | on-sight investigation | | | | |
| 0001 | Erickson, David | 5/21/2020 | 14.00 | 200.00 | 2,800.00 |
| | on-sight investigation, Travel | | | | |
| 0001 | Erickson, David | 5/22/2020 | 4.00 | 200.00 | 800.00 |
| | Unload, disposal, data review, sample COC discussion | | | | |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701**To Pay by *Credit Card:**Copy and paste link app.clientpay.com/home/payment/#/paymentPage/15f4c16b-89f5-4de5-affb-08df1f0ecabf**To Pay by ACH:** Contact accounting@waterenvtech.com to set up

*a 3% processing fee will be charged for all credit card payments

| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | | 1913 |
|------------|---|-----------------------|---------|--------|----------|
| Senior III | | | | | |
| 0007 | Thomson, Patrick THASP | 4/28/2020 | 1.00 | 140.00 | 140.00 |
| 0007 | Thomson, Patrick THASP | 4/30/2020 | 1.00 | 140.00 | 140.00 |
| 0007 | Thomson, Patrick THASP | 5/1/2020 | .50 | 140.00 | 70.00 |
| 0007 | Thomson, Patrick HASP/Equip | 5/7/2020 | .75 | 140.00 | 105.00 |
| Senior II | | | | | |
| 0039 | Nicholls, Steven trip setup | 5/8/2020 | 1.00 | 140.00 | 140.00 |
| 0039 | Nicholls, Steven Trip preparation | 5/16/2020 | 1.00 | 140.00 | 140.00 |
| 0039 | Nicholls, Steven Investigation | 5/17/2020 | 1.00 | 140.00 | 140.00 |
| 0039 | Nicholls, Steven Investigation | 5/18/2020 | 12.00 | 140.00 | 1,680.00 |
| 0039 | Nicholls, Steven Investigation | 5/19/2020 | 11.00 | 140.00 | 1,540.00 |
| 0039 | Nicholls, Steven Investigation | 5/20/2020 | 11.00 | 140.00 | 1,540.00 |
| 0039 | Nicholls, Steven Investigation | 5/21/2020 | 14.00 | 140.00 | 1,960.00 |
| 0039 | Nicholls, Steven Investigation | 5/22/2020 | 2.00 | 140.00 | 280.00 |
| 0039 | Nicholls, Steven declaration | 6/17/2020 | .50 | 140.00 | 70.00 |
| 0039 | Nicholls, Steven declaration | 6/19/2020 | 2.00 | 140.00 | 280.00 |
| Staff I | | | | | |
| 0112 | Brooks, Loran COVID-19 HASM | 4/27/2020 | 4.00 | 80.00 | 320.00 |
| 0112 | Brooks, Loran Health and Safety Plan | 4/28/2020 | 6.00 | 80.00 | 480.00 |
| 0112 | Brooks, Loran HASP and COVID-19 plan development | 4/29/2020 | 6.00 | 80.00 | 480.00 |
| 0112 | Brooks, Loran HASP development | 4/30/2020 | 2.00 | 80.00 | 160.00 |
| 0099 | Eggensperger, Christina printing/reading documents | 5/11/2020 | 1.50 | 80.00 | 120.00 |
| 0099 | Eggensperger, Christina prep | 5/12/2020 | .50 | 80.00 | 40.00 |
| 0099 | Eggensperger, Christina reading docs | 5/13/2020 | 1.25 | 80.00 | 100.00 |
| 0099 | Eggensperger, Christina utility locates, gathering supplies, meet with dave, meet with steve | 5/14/2020 | 4.50 | 80.00 | 360.00 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

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*a 3% processing fee will be charged for all credit card payments

| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | | | Invoice | 1913 |
|----------------------------|--|-----------------------|-------|--------|----------|------|
| 0099 | Eggensperger, Christina prep | 5/15/2020 | 1.50 | 80.00 | 120.00 | |
| 0099 | Eggensperger, Christina prep | 5/16/2020 | 2.00 | 80.00 | 160.00 | |
| 0099 | Eggensperger, Christina prep truck, drive to washington, change probe on YSI, organize supplies for next morning | 5/18/2020 | 11.50 | 80.00 | 920.00 | |
| 0099 | Eggensperger, Christina 6am-7pm, 9-10pm calibrate equipment in morning, meet with utility locates, oversee soil borings, collect samples, get ice for sample storage, fill out COC for shipment following morning (ended up not sending) | 5/19/2020 | 14.00 | 80.00 | 1,120.00 | |
| 0099 | Eggensperger, Christina 7am-6pm calibrate/organize equipment, collect groundwater samples, get ice for sample storage | 5/20/2020 | 11.00 | 80.00 | 880.00 | |
| 0099 | Eggensperger, Christina 730am(pst)-1030pm(mst) calibrate equipment, load trucks, collect groundwater samples, drive back to montana, unload truck | 5/21/2020 | 14.00 | 80.00 | 1,120.00 | |
| 0099 | Eggensperger, Christina 10am-530pm organize all soil and groundwater samples, fill out chain of custody, have steve check COC for QAQC, drive samples to helena, drive back to butte | 5/22/2020 | 7.50 | 80.00 | 600.00 | |
| 0099 | Eggensperger, Christina sample review | 5/28/2020 | 1.00 | 80.00 | 80.00 | |
| GIS Manager | | | | | | |
| 0014 | LeProwse, Jeff DE Maps | 5/13/2020 | 2.00 | 120.00 | 240.00 | |
| 0014 | LeProwse, Jeff DE Maps | 5/14/2020 | 1.00 | 120.00 | 120.00 | |
| 0014 | LeProwse, Jeff DE Maps | 5/15/2020 | 1.00 | 120.00 | 120.00 | |
| 0014 | LeProwse, Jeff DE map | 5/18/2020 | 2.00 | 120.00 | 240.00 | |
| 0014 | LeProwse, Jeff DC map | 5/26/2020 | 2.00 | 120.00 | 240.00 | |
| Environmental Technician 1 | | | | | | |
| 0115 | Carter, Dennis Submitted 4 NOI for CAFO 10 Well water samples | 5/26/2020 | 2.00 | 70.00 | 140.00 | |
| 0115 | Carter, Dennis Process/File WA Confirmed Water well NOIs | 6/4/2020 | 1.00 | 70.00 | 70.00 | |
| 0121 | Hadley, Rachel Creating well logs for Christina using Strater. | 5/27/2020 | 5.50 | 70.00 | 385.00 | |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

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*a 3% processing fee will be charged for all credit card payments

| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | | 1913 |
|------------------------------|---|---|---------|-------|------------------|
| 0121 | Hadley, Rachel 2020 well and boring logs. | 5/28/2020 | 2.75 | 70.00 | 192.50 |
| 0121 | Hadley, Rachel Well logs and data entry | 5/29/2020 | 1.50 | 70.00 | 105.00 |
| 0121 | Hadley, Rachel Well data input for well logs in STRATER. | 6/5/2020 | 1.25 | 70.00 | 87.50 |
| 0121 | Hadley, Rachel Well logs in STRATER | 6/8/2020 | 3.25 | 70.00 | 227.50 |
| 0121 | Hadley, Rachel Well logs in STRATER | 6/9/2020 | 1.50 | 70.00 | 105.00 |
| 0121 | Hadley, Rachel Well logs | 6/15/2020 | .25 | 70.00 | 17.50 |
| 0121 | Hadley, Rachel well logs for CE and SN. | 6/17/2020 | .75 | 70.00 | 52.50 |
| 0121 | Hadley, Rachel well logs for CE and SN | 6/18/2020 | 1.50 | 70.00 | 105.00 |
| Totals | | | 242.50 | | 30,982.50 |
| Total Labor | | | | | 30,982.50 |
| Reimbursable Expenses | | | | | |
| Meals | | | | | |
| EX 0000990 | 5/18/2020 | Eggensperger, Christina / per diem-lunch | | | 10.00 |
| EX 0000990 | 5/21/2020 | Eggensperger, Christina / per diem-dinner | | | 17.00 |
| Laboratory Fees | | | | | |
| AP 2583 | 6/19/2020 | Energy Laboratories / Invoice: 320017, 6/14/2020 | | | 1,447.00 |
| AP 2596 | 6/24/2020 | Energy Laboratories / Invoice: 322109, 6/23/2020 | | | 21,637.50 |
| Licenses and Permits | | | | | |
| CR 043276C | 5/26/2020 | Deposit / ck date 5/26/2020 refund State of WS | | | -120.00 |
| EX 0000993 | 5/26/2020 | Carter, Dennis / Water Sample NOI Wa Dept of Ecology | | | 166.72 |
| Misc Reimbursable Expenses | | | | | |
| EX 0000976 | 4/27/2020 | Kelley, Shari / Request for Certificate of Existence | | | 5.00 |
| Supplies | | | | | |
| EX 0000960 | 5/11/2020 | Foltz, James | | | 66.72 |
| AP 2410 | 5/13/2020 | GeoTech / Invoice: 616990, 5/11/2020 | | | 567.76 |
| EX 0000961 | 5/14/2020 | Eggensperger, Christina / wal-mart supplies for CAFO sampling | | | 132.89 |
| EX 0000990 | 5/17/2020 | Eggensperger, Christina / XL gloves | | | 19.98 |
| EX 0000990 | 5/19/2020 | Eggensperger, Christina / sampling supplies | | | 20.00 |
| EX 0000990 | 5/20/2020 | Eggensperger, Christina / sampling supplies | | | 6.00 |
| AP 2436 | 5/20/2020 | GeoTech / Invoice: 617242, 5/13/2020 | | | 98.67 |
| EX 0001015 | 5/20/2020 | DeBoo, Tyler / Ice | | | 14.51 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

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To Pay by ACH: Contact accounting@waterenvtech.com to set up

*a 3% processing fee will be charged for all credit card payments

| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 1913 |
|----------------------------|-----------|---|---------------------------|--------------------|
| EX 0000990 | 5/21/2020 | Eggensperger, Christina / sampling supplies | 6.00 | |
| AP 2507 | 5/31/2020 | Techline Services, Inc. / Invoice: 20-1496, 5/14/2020 | 292.50 | |
| Total Reimbursables | | | 24,388.25 | 24,388.25 |
| Unit Billing | | | | |
| 1" PVC - 5' Length | | | | |
| | | Consolidated posting | 84.00 | |
| 1" PVC Sreen - 5' Length | | | | |
| | | Consolidated posting | 198.00 | |
| 6600 Mileage (1 Operator) | | | | |
| | | | 2,827.50 | |
| Bentonite | | | | |
| | | Consolidated posting | 178.50 | |
| Geoprobe 6600 (1 Operator) | | | | |
| | | Consolidated posting | 3,330.00 | |
| Mileage | | | | |
| 5/17/2020 | #114 | 1,222.0 Miles @ 0.80 | 977.60 | |
| 5/18/2020 | #105 | 1,109.0 Miles @ 0.80 | 887.20 | |
| 5/18/2020 | #119 | 1,237.0 Miles @ 0.80 | 989.60 | |
| Sample Liners (5' Core) | | | | |
| | | Consolidated posting | 800.00 | |
| Total Units | | | 10,272.40 | 10,272.40 |
| | | | Total this Project | \$65,643.15 |
| | | | Total this Report | \$65,643.15 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

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480 East Park Street | Butte, Montana 59701

Charles Tebbutt
941 Lawrence Street
Eugene, OR 97401

October 9, 2020
Project No: 2018.0088
Invoice No: 2395

Project 2018.0088 SMD/DBD Dairy
Professional Services from August 30, 2020 to September 26, 2020
Professional Personnel

| | Hours | Rate | Amount | |
|--------------------|-------|---------------------------|----------|-------------------|
| Principal | | | | |
| Erickson, David | 13.00 | 200.00 | 2,600.00 | |
| Senior III | | | | |
| Thomson, Patrick | 2.00 | 140.00 | 280.00 | |
| Zaluski, Marek | 2.50 | 140.00 | 350.00 | |
| Senior II | | | | |
| Nicholls, Steven | 1.50 | 140.00 | 210.00 | |
| Staff I | | | | |
| Garza, Janelle | 13.50 | 80.00 | 1,080.00 | |
| Holland, Marcus | 6.50 | 80.00 | 520.00 | |
| Totals | 39.00 | | 5,040.00 | |
| Total Labor | | | | 5,040.00 |
| | | Total this Invoice | | \$5,040.00 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

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To Pay by ACH: Contact accounting@waterenvtech.com to set up

*a 3% processing fee will be charged for all credit card payments

| | | | | |
|---------|-----------|-----------------------|---------|------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 2395 |
|---------|-----------|-----------------------|---------|------|

Billing Backup

Monday, February 8, 2021

Water & Environmental Technologies, Inc.

Invoice 2395 Dated 10/9/2020

4:14:17 PM

| | | |
|---------|-----------|---------------|
| Project | 2018.0088 | SMD/DBD Dairy |
|---------|-----------|---------------|

Professional Personnel

| | | | Hours | Rate | Amount |
|-------------------|--|-----------|-------|--------|--------|
| Principal | | | | | |
| 0001 | Erickson, David | 6/24/2020 | 2.00 | 200.00 | 400.00 |
| | Data Review and Conversation with CT | | | | |
| 0001 | Erickson, David | 6/25/2020 | 3.50 | 200.00 | 700.00 |
| | Data Review and Conversation with CT | | | | |
| 0001 | Erickson, David | 6/26/2020 | 4.50 | 200.00 | 900.00 |
| | Data Review and Conversation with CT, plus call with Judge | | | | |
| 0001 | Erickson, David | 7/6/2020 | .50 | 200.00 | 100.00 |
| | CD Review | | | | |
| 0001 | Erickson, David | 7/9/2020 | .75 | 200.00 | 150.00 |
| | CD Review | | | | |
| 0001 | Erickson, David | 8/31/2020 | .75 | 200.00 | 150.00 |
| | Differential/Statistics discussion | | | | |
| 0001 | Erickson, David | 9/22/2020 | .50 | 200.00 | 100.00 |
| | Lab discussion | | | | |
| 0001 | Erickson, David | 9/23/2020 | .50 | 200.00 | 100.00 |
| | Lab discussion | | | | |
| Senior III | | | | | |
| 0007 | Thomson, Patrick | 7/15/2020 | 1.00 | 140.00 | 140.00 |
| | HASP | | | | |
| 0007 | Thomson, Patrick | 7/17/2020 | 1.00 | 140.00 | 140.00 |
| | HASP Review/Prep | | | | |
| 0040 | Zaluski, Marek | 7/1/2020 | 1.00 | 140.00 | 140.00 |
| | Intro conference with Dave | | | | |
| 0040 | Zaluski, Marek | 7/2/2020 | 1.50 | 140.00 | 210.00 |
| | Formulating opinion | | | | |
| Senior II | | | | | |
| 0039 | Nicholls, Steven | 6/25/2020 | 1.50 | 140.00 | 210.00 |
| | QA/QC | | | | |
| Staff I | | | | | |
| 0111 | Garza, Janelle | 6/25/2020 | 9.00 | 80.00 | 720.00 |
| | Data validation. | | | | |
| 0111 | Garza, Janelle | 6/30/2020 | 4.50 | 80.00 | 360.00 |
| | Data validation. | | | | |
| 0074 | Holland, Marcus | 6/25/2020 | 4.00 | 80.00 | 320.00 |
| | Table creation, data | | | | |
| 0074 | Holland, Marcus | 6/26/2020 | 2.00 | 80.00 | 160.00 |
| | Table creation, data | | | | |
| 0074 | Holland, Marcus | 6/29/2020 | .50 | 80.00 | 40.00 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701**To Pay by *Credit Card:**Copy and paste link app.clientpay.com/home/payment/#/paymentPage/15f4c16b-89f5-4de5-affb-08df1f0ecabf**To Pay by ACH:** Contact accounting@waterenvtech.com to set up

*a 3% processing fee will be charged for all credit card payments

Page 2

| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 2395 |
|---------|--------------------|---------------------------|----------|-------------------|
| | Tables/data | | | |
| | Totals | 39.00 | 5,040.00 | |
| | Total Labor | | | 5,040.00 |
| | | Total this Project | | \$5,040.00 |
| | | Total this Report | | \$5,040.00 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

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To Pay by ACH: Contact accounting@waterenvtech.com to set up

*a 3% processing fee will be charged for all credit card payments

Page 3



480 East Park Street | Butte, Montana 59701

Charles Tebbutt
941 Lawrence Street
Eugene, OR 97401

January 28, 2021
Project No: 2018.0088
Invoice No: 2869

Project 2018.0088 SMD/DBD Dairy
Professional Services from September 29, 2020 to January 23, 2021
Professional Personnel

| | Hours | Rate | Amount | |
|--------------------|-------|---------------------------|----------|-------------------|
| Principal | | | | |
| Erickson, David | 8.00 | 200.00 | 1,600.00 | |
| GIS Manager | | | | |
| LeProwse, Jeff | 2.00 | 120.00 | 240.00 | |
| Totals | 10.00 | | 1,840.00 | |
| Total Labor | | | | 1,840.00 |
| | | Total this Invoice | | \$1,840.00 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

To Pay by *Credit Card:

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To Pay by ACH: Contact accounting@waterenvtech.com to set up

*a 3% processing fee will be charged for all credit card payments

| | | | | |
|---------|-----------|-----------------------|---------|------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 2869 |
|---------|-----------|-----------------------|---------|------|

Billing Backup

Monday, February 8, 2021

Water & Environmental Technologies, Inc.

Invoice 2869 Dated 1/28/2021

4:15:01 PM

| | | |
|---------|-----------|---------------|
| Project | 2018.0088 | SMD/DBD Dairy |
|---------|-----------|---------------|

Professional Personnel

| | | | Hours | Rate | Amount | |
|------|--|------------|-------|---------------------------|----------|-------------------|
| | Principal | | | | | |
| 0001 | Erickson, David | 9/29/2020 | 3.50 | 200.00 | 700.00 | |
| | Calls and discussions with Charlie and the Judge | | | | | |
| 0001 | Erickson, David | 10/19/2020 | .75 | 200.00 | 150.00 | |
| | Field Investigation figure | | | | | |
| 0001 | Erickson, David | 10/23/2020 | .75 | 200.00 | 150.00 | |
| | Field Investigation figure | | | | | |
| 0001 | Erickson, David | 12/10/2020 | 1.50 | 200.00 | 300.00 | |
| | Schedule and Workplan | | | | | |
| 0001 | Erickson, David | 12/11/2020 | 1.50 | 200.00 | 300.00 | |
| | Schedule and Workplan | | | | | |
| | GIS Manager | | | | | |
| 0014 | LeProwse, Jeff | 10/22/2020 | 2.00 | 120.00 | 240.00 | |
| | DE map | | | | | |
| | Totals | | 10.00 | | 1,840.00 | |
| | Total Labor | | | | | 1,840.00 |
| | | | | Total this Project | | \$1,840.00 |
| | | | | Total this Report | | \$1,840.00 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701**To Pay by *Credit Card:**Copy and paste link app.clientpay.com/home/payment/#/paymentPage/15f4c16b-89f5-4de5-affb-08df1f0ecabf**To Pay by ACH:** Contact accounting@waterenvtech.com to set up

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Page 2



480 East Park Street | Butte, Montana 59701

Charles Tebbutt
941 Lawrence Street
Eugene, OR 97401

August 23, 2021
Project No: 2018.0088
Invoice No: 4208
Due Date: September 22, 2021

Project 2018.0088 SMD/DBD Dairy
Professional Services from June 27, 2021 to August 4, 2021
Professional Personnel

| | Hours | Rate | Amount | |
|--------------------|-------|--------|----------|-----------------|
| Principal | | | | |
| Erickson, David | 9.25 | 250.00 | 2,312.50 | |
| Senior I | | | | |
| Henne, William | 15.75 | 175.00 | 2,756.25 | |
| Staff I | | | | |
| Livingston, Dylan | 4.50 | 125.00 | 562.50 | |
| GIS Specialist | | | | |
| Hulla, Jordan | 4.00 | 95.00 | 380.00 | |
| Totals | 33.50 | | 6,011.25 | |
| Total Labor | | | | 6,011.25 |

Reimbursable Expenses

| | | |
|----------------------------|---------------|---------------|
| Meals | 70.00 | |
| Lodging | 215.98 | |
| Misc Reimbursable Expenses | 196.14 | |
| Total Reimbursables | 482.12 | 482.12 |

Unit Billing

| | | | |
|-----------|--------------------|----------------------|-----------------|
| Mileage | | | |
| 6/30/2021 | Hertz #1 | 1,422.0 Miles @ 0.80 | 1,137.60 |
| | Total Units | | 1,137.60 |

Total this Invoice \$7,630.97

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480 East Park Street | Butte, Montana 59701

Charles Tebbutt
941 Lawrence Street
Eugene, OR 97401

July 19, 2021
Project No: 2018.0088
Invoice No: 4207
Due Date: August 18, 2021

Project 2018.0088 SMD/DBD Dairy
Professional Services from February 15, 2021 to June 26, 2021
Professional Personnel

| | Hours | Rate | Amount | |
|--------------------|-------|--------|-----------|------------------|
| Principal | | | | |
| Erickson, David | 26.75 | 250.00 | 6,687.50 | |
| Senior I | | | | |
| Henne, William | 34.00 | 175.00 | 5,950.00 | |
| Staff I | | | | |
| Hadley, Rachel | 2.00 | 125.00 | 250.00 | |
| Holland, Marcus | 1.00 | 125.00 | 125.00 | |
| Livingston, Dylan | 33.25 | 125.00 | 4,156.25 | |
| Totals | 97.00 | | 17,168.75 | |
| Total Labor | | | | 17,168.75 |

Reimbursable Expenses

| | | | |
|----------------------------|--|---------------|---------------|
| Meals | | 122.00 | |
| Lodging | | 368.93 | |
| Total Reimbursables | | 490.93 | 490.93 |

Unit Billing

| | | | |
|--------------------|-------|--------------------|---------------|
| Mileage | | | |
| 5/14/2021 | Hertz | 394.0 Miles @ 0.80 | 315.20 |
| Total Units | | | 315.20 |

Total this Invoice \$17,974.88

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480 East Park Street | Butte, Montana 59701

Charles Tebbutt
941 Lawrence Street
Eugene, OR 97401

July 06, 2022
Project No: 2018.0088
Invoice No: 5956
Due Date: August 05, 2022

Project 2018.0088 CAFOM10 SMD/DBD Dairy

Professional Services from May 1, 2022 to May 28, 2022

Professional Personnel

| | Hours | Rate | Amount | |
|-------------------------|-------|--------|----------|-----------------|
| Principal | | | | |
| Erickson, David | 27.75 | 250.00 | 6,937.50 | |
| Senior Consultant | | | | |
| Zaluski, Marek | 6.50 | 250.00 | 1,625.00 | |
| Staff II | | | | |
| Eggensperger, Christina | 4.25 | 125.00 | 531.25 | |
| GIS Manager | | | | |
| LeProwse, Jeff | 2.00 | 150.00 | 300.00 | |
| Totals | 40.50 | | 9,393.75 | |
| Total Labor | | | | 9,393.75 |

Reimbursable Expenses

| | | | | |
|----------------------------|--|--|--------------|--------------|
| Supplies | | | 59.94 | |
| Total Reimbursables | | | 59.94 | 59.94 |

Unit Billing

| | | | | |
|--------------------|-------|--------------------|---------------|---------------|
| Mileage | | | | |
| 5/3/2022 | Hertz | 349.5 Miles @ 0.80 | 279.60 | |
| Total Units | | | 279.60 | 279.60 |

Total this Invoice **\$9,733.29**

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| | | | | |
|---------|-----------|-----------------------|---------|------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 5956 |
|---------|-----------|-----------------------|---------|------|

Billing Backup

Thursday, July 7, 2022

Water & Environmental Technologies, Inc.

Invoice 5956 Dated 7/6/2022

4:33:53 PM

| | | |
|---------|-----------|-----------------------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy |
|---------|-----------|-----------------------|

Professional Personnel

| | | | Hours | Rate | Amount |
|-------------------|--|-----------|-------|--------|----------|
| Principal | | | | | |
| 0001 | Erickson, David | 8/23/2021 | 1.50 | 250.00 | 375.00 |
| | Review Transition Plan | | | | |
| 0001 | Erickson, David | 9/3/2021 | .50 | 250.00 | 125.00 |
| | Site visit | | | | |
| 0001 | Erickson, David | 2/16/2022 | 2.25 | 250.00 | 562.50 |
| | Review, Attempted Conf Call. Conf call with Lawyers and Scot | | | | |
| 0001 | Erickson, David | 2/23/2022 | .75 | 250.00 | 187.50 |
| | Data Review | | | | |
| 0001 | Erickson, David | 2/24/2022 | 2.50 | 250.00 | 625.00 |
| | Call & Data review | | | | |
| 0001 | Erickson, David | 3/25/2022 | .25 | 250.00 | 62.50 |
| | discussion | | | | |
| 0001 | Erickson, David | 4/25/2022 | .75 | 250.00 | 187.50 |
| | Settlement Discussion | | | | |
| 0001 | Erickson, David | 4/28/2022 | .75 | 250.00 | 187.50 |
| | Settlement Discussion | | | | |
| 0001 | Erickson, David | 5/2/2022 | 4.50 | 250.00 | 1,125.00 |
| | Travel & Inspection | | | | |
| 0001 | Erickson, David | 5/4/2022 | 7.00 | 250.00 | 1,750.00 |
| | Onsite Meeting, Inspection, Travel | | | | |
| 0001 | Erickson, David | 5/17/2022 | 1.00 | 250.00 | 250.00 |
| | Proposal review and remediation research | | | | |
| 0001 | Erickson, David | 5/18/2022 | 2.00 | 250.00 | 500.00 |
| | Proposal review and remediation research | | | | |
| 0001 | Erickson, David | 5/19/2022 | 2.00 | 250.00 | 500.00 |
| | Proposal review and remediation research | | | | |
| 0001 | Erickson, David | 5/20/2022 | 2.00 | 250.00 | 500.00 |
| | Proposal review and remediation research | | | | |
| Senior Consultant | | | | | |
| 0040 | Zaluski, Marek | 5/19/2022 | 4.50 | 250.00 | 1,125.00 |
| | Research on electrokinetics and Finney enzymes | | | | |
| 0040 | Zaluski, Marek | 5/23/2022 | 2.00 | 250.00 | 500.00 |
| | Ordering and reviewing the enzyme paper | | | | |
| Staff II | | | | | |
| 0099 | Eggensperger, Christina | 5/24/2022 | 2.25 | 125.00 | 281.25 |
| | table updates for dave | | | | |

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| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | | 5956 |
|------------------------------|--|-------------------------------|---------|---------------|-------------------|
| 0099 | Eggensperger, Christina finish table updates GIS Manager | 5/27/2022 | 2.00 | 125.00 | 250.00 |
| 0014 | LeProwse, Jeff ce maps | 5/24/2022 | 2.00 | 150.00 | 300.00 |
| Totals | | | 40.50 | 9,393.75 | |
| Total Labor | | | | | 9,393.75 |
| Reimbursable Expenses | | | | | |
| Supplies | | | | | |
| EX 0002663 | 5/23/2022 | Zaluski, Marek / Enzyme paper | | 59.94 | |
| Total Reimbursables | | | | 59.94 | 59.94 |
| Unit Billing | | | | | |
| Mileage | | | | | |
| 5/3/2022 | Hertz | 349.5 Miles @ 0.80 | | 279.60 | |
| Total Units | | | | 279.60 | 279.60 |
| Total this Project | | | | | \$9,733.29 |
| Total this Report | | | | | \$9,733.29 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

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480 East Park Street | Butte, Montana 59701

Charles Tebbutt
941 Lawrence Street
Eugene, OR 97401

August 09, 2022
Project No: 2018.0088
Invoice No: 6195
Due Date: September 08, 2022

Project 2018.0088 CAFOM10 SMD/DBD Dairy

Professional Services from June 26, 2022 to July 31, 2022

Professional Personnel

| | Hours | Rate | Amount | |
|---------------------------|-------|--------|-----------|---------------------------|
| Principal | | | | |
| Erickson, David | 18.75 | 250.00 | 4,687.50 | |
| Senior Consultant | | | | |
| Zaluski, Marek | 27.50 | 250.00 | 6,875.00 | |
| Senior I | | | | |
| Surratt, Laura | 2.00 | 175.00 | 350.00 | |
| Totals | 48.25 | | 11,912.50 | |
| Total Labor | | | | 11,912.50 |
| Total this Invoice | | | | <u>\$11,912.50</u> |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

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| | | | | |
|---------|-----------|-----------------------|---------|------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 6195 |
|---------|-----------|-----------------------|---------|------|

Billing Backup

Tuesday, August 9, 2022

Water & Environmental Technologies, Inc.

Invoice 6195 Dated 8/9/2022

8:12:30 PM

| | | |
|---------|-----------|-----------------------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy |
|---------|-----------|-----------------------|

Professional Personnel

| | | | Hours | Rate | Amount |
|-------------------|--|-----------|-------|---------------------------|--------------------|
| Principal | | | | | |
| 0001 | Erickson, David | 6/9/2022 | 3.00 | 250.00 | 750.00 |
| | Remediation Plan | | | | |
| 0001 | Erickson, David | 6/10/2022 | 6.00 | 250.00 | 1,500.00 |
| | Remediation Plan | | | | |
| 0001 | Erickson, David | 6/23/2022 | 1.00 | 250.00 | 250.00 |
| | Schedule & Costs | | | | |
| 0001 | Erickson, David | 6/24/2022 | 2.00 | 250.00 | 500.00 |
| | Converation | | | | |
| 0001 | Erickson, David | 6/28/2022 | 3.00 | 250.00 | 750.00 |
| | Schedule & Cost | | | | |
| 0001 | Erickson, David | 6/29/2022 | 2.00 | 250.00 | 500.00 |
| | Scope & Costs | | | | |
| 0001 | Erickson, David | 7/12/2022 | 1.00 | 250.00 | 250.00 |
| | Conference call | | | | |
| 0001 | Erickson, David | 7/25/2022 | .75 | 250.00 | 187.50 |
| | Call & Discussion | | | | |
| Senior Consultant | | | | | |
| 0040 | Zaluski, Marek | 6/1/2022 | 3.50 | 250.00 | 875.00 |
| | Researching the impact of slope and K impact on manure leachate infiltration. | | | | |
| 0040 | Zaluski, Marek | 6/2/2022 | 2.00 | 250.00 | 500.00 |
| | Researching the impact of slope and K impact on manure leachate infiltration. | | | | |
| 0040 | Zaluski, Marek | 6/4/2022 | 10.00 | 250.00 | 2,500.00 |
| | Preparing writeup on the impact of K and liners slope on leachate infiltration | | | | |
| 0040 | Zaluski, Marek | 6/5/2022 | 8.00 | 250.00 | 2,000.00 |
| | Preparing write up on K and slope: | | | | |
| 0040 | Zaluski, Marek | 6/6/2022 | 4.00 | 250.00 | 1,000.00 |
| | Revising, polishing writeup on K and liner's slope | | | | |
| Senior I | | | | | |
| 0051 | Surratt, Laura | 7/20/2022 | 2.00 | 175.00 | 350.00 |
| | research | | | | |
| | Totals | | 48.25 | | 11,912.50 |
| | Total Labor | | | | 11,912.50 |
| | | | | Total this Project | \$11,912.50 |

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| | | | | |
|-------------------|-----------|-----------------------|-------------|------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 6195 |
| Total this Report | | | \$11,912.50 | |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

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480 East Park Street | Butte, Montana 59701

Charles Tebbutt
941 Lawrence Street
Eugene, OR 97401

October 12, 2022
Project No: 2018.0088
Invoice No: 6671
Due Date: November 11, 2022

Project 2018.0088 CAFOM10 SMD/DBD Dairy
Professional Services from August 28, 2022 to September 24, 2022

Professional Personnel

| | Hours | Rate | Amount |
|---------------------------|-------|--------|---------------------------|
| Officer/Principal | | | |
| Erickson, David | 8.50 | 250.00 | 2,125.00 |
| Senior GIS Manager | | | |
| LeProwse, Jeff | 10.00 | 150.00 | 1,500.00 |
| Senior I - Engineer | | | |
| Surratt, Laura | 11.00 | 175.00 | 1,925.00 |
| Senior I - Scientist | | | |
| Alexander, Jess | 51.75 | 175.00 | 9,056.25 |
| Totals | 81.25 | | 14,606.25 |
| Total Labor | | | 14,606.25 |
| Total this Invoice | | | <u>\$14,606.25</u> |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

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| | | | | |
|---------|-----------|-----------------------|---------|------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 6671 |
|---------|-----------|-----------------------|---------|------|

Billing Backup

Wednesday, October 12, 2022

Water & Environmental Technologies, Inc.

Invoice 6671 Dated 10/12/2022

7:54:08 AM

| | | |
|---------|-----------|-----------------------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy |
|---------|-----------|-----------------------|

Professional Personnel

| | | | Hours | Rate | Amount |
|------|----------------------------|-----------|-------|--------|--------|
| | Officer/Principal | | | | |
| 0001 | Erickson, David | 8/8/2022 | 1.50 | 250.00 | 375.00 |
| | Discuss SAP | | | | |
| 0001 | Erickson, David | 8/9/2022 | 1.00 | 250.00 | 250.00 |
| | Discuss SAP | | | | |
| 0001 | Erickson, David | 8/22/2022 | 1.00 | 250.00 | 250.00 |
| | Work Plan | | | | |
| 0001 | Erickson, David | 8/24/2022 | 1.00 | 250.00 | 250.00 |
| | work plan | | | | |
| 0001 | Erickson, David | 8/26/2022 | 1.00 | 250.00 | 250.00 |
| | work plan | | | | |
| 0001 | Erickson, David | 8/29/2022 | 1.50 | 250.00 | 375.00 |
| | discussions - detail costs | | | | |
| 0001 | Erickson, David | 8/30/2022 | .75 | 250.00 | 187.50 |
| | discussions - detail costs | | | | |
| 0001 | Erickson, David | 8/31/2022 | .75 | 250.00 | 187.50 |
| | discussions - detail costs | | | | |
| | Senior GIS Manager | | | | |
| 0014 | LeProwse, Jeff | 9/21/2022 | 2.00 | 150.00 | 300.00 |
| | maps | | | | |
| 0014 | LeProwse, Jeff | 9/22/2022 | 6.00 | 150.00 | 900.00 |
| | maps | | | | |
| 0014 | LeProwse, Jeff | 9/23/2022 | 2.00 | 150.00 | 300.00 |
| | maps | | | | |
| | Senior I - Engineer | | | | |
| 0051 | Surratt, Laura | 8/1/2022 | 1.00 | 175.00 | 175.00 |
| | research | | | | |
| 0051 | Surratt, Laura | 8/2/2022 | 4.00 | 175.00 | 700.00 |
| | research | | | | |
| 0051 | Surratt, Laura | 8/8/2022 | 2.50 | 175.00 | 437.50 |
| | research | | | | |
| 0051 | Surratt, Laura | 8/17/2022 | 1.00 | 175.00 | 175.00 |
| | vermiculture research | | | | |
| 0051 | Surratt, Laura | 8/24/2022 | 2.50 | 175.00 | 437.50 |
| | research | | | | |

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| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 6671 |
|----------------------|--|-----------------------|---------------------------|--------------------|
| Senior I - Scientist | | | | |
| 0176 | Alexander, Jess | 8/8/2022 | 2.00 | 175.00 |
| | Meeting with David and Data Review | | | |
| 0176 | Alexander, Jess | 8/9/2022 | 7.25 | 175.00 |
| | Data Review | | | |
| 0176 | Alexander, Jess | 8/15/2022 | 7.00 | 175.00 |
| | EPA Review, SAP DRAFT | | | |
| 0176 | Alexander, Jess | 8/16/2022 | 7.00 | 175.00 |
| | Work Plan Draft | | | |
| 0176 | Alexander, Jess | 8/25/2022 | 4.00 | 175.00 |
| | Costs Update | | | |
| 0176 | Alexander, Jess | 8/26/2022 | 3.00 | 175.00 |
| | Costs Update/Review Vermiculture Research | | | |
| 0176 | Alexander, Jess | 8/29/2022 | 7.00 | 175.00 |
| | Meeting with Dave, Consent Decree DRAFT review, Remediation/Monitoring Summary | | | |
| 0176 | Alexander, Jess | 8/30/2022 | 7.50 | 175.00 |
| | RI DRAFT and Costs | | | |
| 0176 | Alexander, Jess | 9/2/2022 | 2.00 | 175.00 |
| | 2022 Soils Rpt. | | | |
| 0176 | Alexander, Jess | 9/20/2022 | 1.00 | 175.00 |
| | Water Rights Research | | | |
| 0176 | Alexander, Jess | 9/21/2022 | 2.00 | 175.00 |
| | Water Rights | | | |
| 0176 | Alexander, Jess | 9/22/2022 | 1.00 | 175.00 |
| | Figures Review/Water Rights | | | |
| 0176 | Alexander, Jess | 9/23/2022 | 1.00 | 175.00 |
| | Figure Review | | | |
| | Totals | | 81.25 | 14,606.25 |
| | Total Labor | | | 14,606.25 |
| | | | Total this Project | \$14,606.25 |
| | | | Total this Report | \$14,606.25 |

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480 East Park Street | Butte, Montana 59701

Charles Tebbutt
941 Lawrence Street
Eugene, OR 97401

November 15, 2022
Project No: 2018.0088
Invoice No: 6978
Due Date: December 15, 2022

Project 2018.0088 CAFOM10 SMD/DBD Dairy
Professional Services from September 25, 2022 to October 31, 2022

Professional Personnel

| | Hours | Rate | Amount |
|-------------------------------|-------|--------|------------------|
| Officer/Principal | | | |
| Erickson, David | 21.75 | 250.00 | 5,437.50 |
| Senior GIS Manager | | | |
| LeProwse, Jeff | 2.00 | 150.00 | 300.00 |
| Senior I - Scientist | | | |
| Alexander, Jess | 68.50 | 175.00 | 11,987.50 |
| GIS Specialist | | | |
| Hulla, Jordan | 1.00 | 95.00 | 95.00 |
| Technician I - GIS Technician | | | |
| Kresan, Kimarie | 5.00 | 85.00 | 425.00 |
| Totals | 98.25 | | 18,245.00 |
| Total Labor | | | 18,245.00 |

Reimbursable Expenses

| | | | |
|----------------------------|--|--|---------------|
| Lodging | | | 136.92 |
| Total Reimbursables | | | 136.92 |

Unit Billing

| | | | |
|--------------------|----------------------|--------------------|---------------|
| Mileage | | | |
| 9/29/2022 | Butte Rental Vehicle | 193.6 Miles @ 1.00 | 193.60 |
| Total Units | | | 193.60 |

Total this Invoice \$18,575.52

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

To Pay by *Credit Card: <https://waterenvtech.com> and click on Invoice & Bid Package Pay

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| | | | | |
|---------|-----------|-----------------------|---------|------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 6978 |
|---------|-----------|-----------------------|---------|------|

Billing Backup

Wednesday, November 16, 2022

Water & Environmental Technologies, Inc.

Invoice 6978 Dated 11/15/2022

2:02:47 PM

| | | |
|---------|-----------|-----------------------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy |
|---------|-----------|-----------------------|

Professional Personnel

| | | | Hours | Rate | Amount |
|----------------------|---|------------|-------|--------|----------|
| Officer/Principal | | | | | |
| 0001 | Erickson, David | 9/26/2022 | 2.00 | 250.00 | 500.00 |
| | Travel | | | | |
| 0001 | Erickson, David | 9/27/2022 | 4.50 | 250.00 | 1,125.00 |
| | Meeting & Drive by | | | | |
| 0001 | Erickson, David | 9/28/2022 | 2.00 | 250.00 | 500.00 |
| | travel | | | | |
| 0001 | Erickson, David | 9/29/2022 | 4.50 | 250.00 | 1,125.00 |
| | Work Plan outline. Call with Scott Stephen. Call with Charlie | | | | |
| 0001 | Erickson, David | 10/3/2022 | .50 | 250.00 | 125.00 |
| | RI & Remediation Planning | | | | |
| 0001 | Erickson, David | 10/5/2022 | .50 | 250.00 | 125.00 |
| | RI & Remediation Planning | | | | |
| 0001 | Erickson, David | 10/7/2022 | .75 | 250.00 | 187.50 |
| | RI & Remediation Planning | | | | |
| 0001 | Erickson, David | 10/10/2022 | 1.00 | 250.00 | 250.00 |
| | Work Plan | | | | |
| 0001 | Erickson, David | 10/11/2022 | .50 | 250.00 | 125.00 |
| | Work Plan | | | | |
| 0001 | Erickson, David | 10/14/2022 | .50 | 250.00 | 125.00 |
| | Work Plan | | | | |
| 0001 | Erickson, David | 10/19/2022 | 1.00 | 250.00 | 250.00 |
| | Work Plan | | | | |
| 0001 | Erickson, David | 10/20/2022 | 1.00 | 250.00 | 250.00 |
| | Work Plan | | | | |
| 0001 | Erickson, David | 10/21/2022 | 1.00 | 250.00 | 250.00 |
| | Work Plan | | | | |
| 0001 | Erickson, David | 10/25/2022 | .25 | 250.00 | 62.50 |
| | RI Work Plan | | | | |
| 0001 | Erickson, David | 10/27/2022 | .75 | 250.00 | 187.50 |
| | RI Work Plan | | | | |
| 0001 | Erickson, David | 10/28/2022 | 1.00 | 250.00 | 250.00 |
| | conferene call & RI WP | | | | |
| Senior GIS Manager | | | | | |
| 0014 | LeProwse, Jeff | 10/4/2022 | 2.00 | 150.00 | 300.00 |
| | maps | | | | |
| Senior I - Scientist | | | | | |
| 0176 | Alexander, Jess | 8/10/2022 | 6.00 | 175.00 | 1,050.00 |
| | Data Review and Start Work Plan Draft | | | | |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

Page 2

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| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | | | Invoice | 6978 |
|-------------------------------|--|-----------------------|-------|--------|-----------|------------------|
| 0176 | Alexander, Jess Work Plan Draft | 8/11/2022 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess Well and Soil Points, Draft WP | 8/17/2022 | 7.50 | 175.00 | 1,312.50 | |
| 0176 | Alexander, Jess Draft Work Plan | 8/19/2022 | 6.50 | 175.00 | 1,137.50 | |
| 0176 | Alexander, Jess Updated RI Workplan | 8/31/2022 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess Field | 9/27/2022 | 4.50 | 175.00 | 787.50 | |
| 0176 | Alexander, Jess RI Research/Call with Scott | 9/29/2022 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess RI Revisions | 10/3/2022 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess RI Revisions | 10/4/2022 | 3.00 | 175.00 | 525.00 | |
| 0176 | Alexander, Jess Revised RI RPT | 10/5/2022 | 7.00 | 175.00 | 1,225.00 | |
| 0176 | Alexander, Jess Revised RI RPT | 10/6/2022 | 7.00 | 175.00 | 1,225.00 | |
| 0176 | Alexander, Jess Revised RI RPT | 10/7/2022 | 4.00 | 175.00 | 700.00 | |
| 0176 | Alexander, Jess Start Remediation System Memo | 10/18/2022 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess Remediation System Memo | 10/19/2022 | 5.00 | 175.00 | 875.00 | |
| 0176 | Alexander, Jess Remediation System Memo - Figures | 10/20/2022 | 4.00 | 175.00 | 700.00 | |
| 0176 | Alexander, Jess Memo/RI Edits/ Scott Call | 10/25/2022 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess Report Edits/Charlie Call | 10/28/2022 | 2.00 | 175.00 | 350.00 | |
| GIS Specialist | | | | | | |
| 0126 | Hulla, Jordan QC | 10/12/2022 | 1.00 | 95.00 | 95.00 | |
| Technician I - GIS Technician | | | | | | |
| 0167 | Kresan, Kimarie GIS maps | 10/12/2022 | 3.50 | 85.00 | 297.50 | |
| 0167 | Kresan, Kimarie GIS maps | 10/13/2022 | .75 | 85.00 | 63.75 | |
| 0167 | Kresan, Kimarie GIS map edits | 10/14/2022 | .75 | 85.00 | 63.75 | |
| Totals | | | 98.25 | | 18,245.00 | |
| Total Labor | | | | | | 18,245.00 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

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Page 3

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| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 6978 |
|------------------------------|----------------------|--|---------------------------|--------------------|
| Reimbursable Expenses | | | | |
| Lodging | | | | |
| AP 8161 | 10/17/2022 | Hotel Engine / Dave Erickson / Invoice: 491507-2209-4, 10/17/2022 | 68.46 | |
| AP 8161 | 10/17/2022 | Hotel Engine / Dave Erickson / Invoice: 491507-2209-4, 10/17/2022 | 68.46 | |
| Total Reimbursables | | | 136.92 | 136.92 |
| Unit Billing | | | | |
| Mileage | | | | |
| 9/29/2022 | Butte Rental Vehicle | 193.6 Miles @ 1.00 | 193.60 | |
| Total Units | | | 193.60 | 193.60 |
| | | | Total this Project | \$18,575.52 |
| | | | Total this Report | \$18,575.52 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

To Pay by *Credit Card: <https://waterenvtech.com> and click on Invoice & Bid Package Pay

Page 4

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480 East Park Street | Butte, Montana 59701

Charles Tebbutt
941 Lawrence Street
Eugene, OR 97401

February 10, 2023
Project No: 2018.0088
Invoice No: 7547
Due Date: March 12, 2023

Project 2018.0088 CAFOM10 SMD/DBD Dairy
Professional Services from December 20, 2022 to January 28, 2023

Professional Personnel

| | Hours | Rate | Amount | |
|----------------------|-------|--------|----------|-----------------|
| Officer/Principal | | | | |
| Erickson, David | 6.00 | 250.00 | 1,500.00 | |
| Senior GIS Manager | | | | |
| LeProwse, Jeff | 6.00 | 150.00 | 900.00 | |
| Senior I - Scientist | | | | |
| Alexander, Jess | 41.00 | 175.00 | 7,175.00 | |
| Totals | 53.00 | | 9,575.00 | |
| Total Labor | | | | 9,575.00 |

Reimbursable Expenses

| | | | | |
|----------------------------|--|--|---------------|---------------|
| Lodging | | | 526.61 | |
| Total Reimbursables | | | 526.61 | 526.61 |

Total this Invoice \$10,101.61

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

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WET will mail you a form to fill out. WET will **NEVER** send our banking information or ask for your banking or personal information by email.

| | | | | |
|---------|-----------|-----------------------|---------|------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 7547 |
|---------|-----------|-----------------------|---------|------|

Billing Backup

Tuesday, February 14, 2023

Water & Environmental Technologies, Inc.

Invoice 7547 Dated 2/10/2023

1:00:42 PM

| | | |
|---------|-----------|-----------------------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy |
|---------|-----------|-----------------------|

Professional Personnel

| | | | Hours | Rate | Amount |
|-----------------------------|---|------------|-------|--------|----------|
| Officer/Principal | | | | | |
| 0001 | Erickson, David | 12/20/2022 | 1.00 | 250.00 | 250.00 |
| | Discussion and response | | | | |
| 0001 | Erickson, David | 12/21/2022 | 1.00 | 250.00 | 250.00 |
| | Discussion and response | | | | |
| 0001 | Erickson, David | 1/12/2023 | 2.00 | 250.00 | 500.00 |
| | Review Email. Discussion with Charlie | | | | |
| 0001 | Erickson, David | 1/13/2023 | 2.00 | 250.00 | 500.00 |
| | Discussion with jess. update RI | | | | |
| Senior GIS Manager | | | | | |
| 0014 | LeProwse, Jeff | 1/16/2023 | 2.00 | 150.00 | 300.00 |
| | JA maps | | | | |
| 0014 | LeProwse, Jeff | 1/17/2023 | 3.00 | 150.00 | 450.00 |
| | JA maps | | | | |
| 0014 | LeProwse, Jeff | 1/18/2023 | 1.00 | 150.00 | 150.00 |
| | JA maps | | | | |
| Senior I - Scientist | | | | | |
| 0176 | Alexander, Jess | 1/3/2023 | 2.00 | 175.00 | 350.00 |
| | Review of John and Scott's Email. Draft Response | | | | |
| 0176 | Alexander, Jess | 1/6/2023 | 1.00 | 175.00 | 175.00 |
| | Draft Response Edits | | | | |
| 0176 | Alexander, Jess | 1/9/2023 | 2.00 | 175.00 | 350.00 |
| | Reporting | | | | |
| 0176 | Alexander, Jess | 1/11/2023 | 2.00 | 175.00 | 350.00 |
| | Update and Revise RI | | | | |
| 0176 | Alexander, Jess | 1/12/2023 | 2.00 | 175.00 | 350.00 |
| | Emails to Charlie, Dave, John on RI changes. | | | | |
| 0176 | Alexander, Jess | 1/13/2023 | 6.00 | 175.00 | 1,050.00 |
| | Revised RI. Reporting, Tables, Figures. | | | | |
| 0176 | Alexander, Jess | 1/16/2023 | 6.00 | 175.00 | 1,050.00 |
| | RI Draft, figures and edits. | | | | |
| 0176 | Alexander, Jess | 1/17/2023 | 4.00 | 175.00 | 700.00 |
| | RI Final Draft | | | | |
| 0176 | Alexander, Jess | 1/18/2023 | 4.00 | 175.00 | 700.00 |
| | Response to Johns RI Comments. | | | | |
| 0176 | Alexander, Jess | 1/19/2023 | 4.00 | 175.00 | 700.00 |
| | Review of Deposition Files/Response to Johns RI Comments. | | | | |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

Page 2

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| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | | | Invoice | 7547 |
|------------------------------|----------------------------|--------------------------------------|-------|--------|---------------|--------------------|
| 0176 | Alexander, Jess RI | 1/23/2023 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess RI | 1/24/2023 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess RI | 1/26/2023 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess RI | 1/27/2023 | 2.00 | 175.00 | 350.00 | |
| | Totals | | 53.00 | | 9,575.00 | |
| | Total Labor | | | | | 9,575.00 |
| Reimbursable Expenses | | | | | | |
| Lodging | | | | | | |
| EX 0003256 | 9/27/2022 | Erickson, David / Holiday inn Yakima | | | 526.61 | |
| | Total Reimbursables | | | | 526.61 | 526.61 |
| Total this Project | | | | | | \$10,101.61 |
| Total this Report | | | | | | \$10,101.61 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

To Pay by *Credit Card: <https://waterenvtech.com> and click on Invoice & Bid Package Pay

Page 3

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WET will mail you a form to fill out. WET will **NEVER** send our banking information or ask for your banking or personal information by email.



480 East Park Street | Butte, Montana 59701

Charles Tebbutt
941 Lawrence Street
Eugene, OR 97401

March 08, 2023
Project No: 2018.0088
Invoice No: 7720
Due Date: April 07, 2023

Project 2018.0088 CAFOM10 SMD/DBD Dairy
Professional Services from January 29, 2023 to February 25, 2023

Professional Personnel

| | Hours | Rate | Amount |
|---------------------------|-------|--------|---------------------------|
| Officer/Principal | | | |
| Erickson, David | 32.00 | 250.00 | 8,000.00 |
| Senior GIS Manager | | | |
| LeProwse, Jeff | 4.00 | 150.00 | 600.00 |
| Senior I - Scientist | | | |
| Alexander, Jess | 26.00 | 175.00 | 4,550.00 |
| Totals | 62.00 | | 13,150.00 |
| Total Labor | | | 13,150.00 |
| Total this Invoice | | | <u>\$13,150.00</u> |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

To Pay by *Credit Card: <https://waterenvtech.com> and click on Invoice & Bid Package Pay

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To Pay by ACH: Contact accounting@waterenvtech.com to set up

WET will mail you a form to fill out. WET will **NEVER** send our banking information or ask for your banking or personal information by email.

Tebbutt Declaration Exhibit 2

| | | | | |
|---------|-----------|-----------------------|---------|------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 7720 |
|---------|-----------|-----------------------|---------|------|

Billing Backup

Wednesday, March 8, 2023

Water & Environmental Technologies, Inc.

Invoice 7720 Dated 3/8/2023

12:43:58 PM

| | | |
|---------|-----------|-----------------------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy |
|---------|-----------|-----------------------|

Professional Personnel

| | | | Hours | Rate | Amount |
|-------------------|---------------------------|-----------|-------|--------|--------|
| Officer/Principal | | | | | |
| 0001 | Erickson, David | 1/30/2023 | 1.00 | 250.00 | 250.00 |
| | RI Plan | | | | |
| 0001 | Erickson, David | 1/31/2023 | 2.00 | 250.00 | 500.00 |
| | RI Plan | | | | |
| 0001 | Erickson, David | 2/1/2023 | 1.00 | 250.00 | 250.00 |
| | RI Plan | | | | |
| 0001 | Erickson, David | 2/2/2023 | 2.00 | 250.00 | 500.00 |
| | RI Plan | | | | |
| 0001 | Erickson, David | 2/3/2023 | 1.00 | 250.00 | 250.00 |
| | RI Plan | | | | |
| 0001 | Erickson, David | 2/6/2023 | 1.00 | 250.00 | 250.00 |
| | Disclosure \$ Settlement | | | | |
| 0001 | Erickson, David | 2/7/2023 | 1.00 | 250.00 | 250.00 |
| | Disclosure \$ Settlement | | | | |
| 0001 | Erickson, David | 2/8/2023 | 2.00 | 250.00 | 500.00 |
| | Disclosure \$ Settlement | | | | |
| 0001 | Erickson, David | 2/9/2023 | 1.00 | 250.00 | 250.00 |
| | Disclosure \$ Settlement | | | | |
| 0001 | Erickson, David | 2/12/2023 | 1.00 | 250.00 | 250.00 |
| | draft disclosure | | | | |
| 0001 | Erickson, David | 2/13/2023 | 2.00 | 250.00 | 500.00 |
| | discussions | | | | |
| 0001 | Erickson, David | 2/16/2023 | 2.00 | 250.00 | 500.00 |
| | Discussions on Settlement | | | | |
| 0001 | Erickson, David | 2/17/2023 | 3.00 | 250.00 | 750.00 |
| | Discussions on Settlement | | | | |
| 0001 | Erickson, David | 2/20/2023 | 2.00 | 250.00 | 500.00 |
| | disclosure | | | | |
| 0001 | Erickson, David | 2/21/2023 | 3.00 | 250.00 | 750.00 |
| | disclosure | | | | |
| 0001 | Erickson, David | 2/22/2023 | 3.00 | 250.00 | 750.00 |
| | disclosure | | | | |
| 0001 | Erickson, David | 2/23/2023 | 2.00 | 250.00 | 500.00 |
| | disclosure | | | | |
| 0001 | Erickson, David | 2/24/2023 | 2.00 | 250.00 | 500.00 |
| | disclosure | | | | |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

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Tebbutt Declaration Exhibit 2

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| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | | | Invoice | 7720 |
|----------------------|--|-----------------------|-------|--------|-----------|-------------|
| Senior GIS Manager | | | | | | |
| 0014 | LeProwse, Jeff ja maps | 1/31/2023 | 2.00 | 150.00 | 300.00 | |
| 0014 | LeProwse, Jeff ja maps | 2/1/2023 | 1.00 | 150.00 | 150.00 | |
| 0014 | LeProwse, Jeff ja maps | 2/2/2023 | 1.00 | 150.00 | 150.00 | |
| Senior I - Scientist | | | | | | |
| 0176 | Alexander, Jess Deposition Download/Review | 1/30/2023 | 4.00 | 175.00 | 700.00 | |
| 0176 | Alexander, Jess RI figures/tables/text | 1/31/2023 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess Revise RI Text | 2/1/2023 | 4.00 | 175.00 | 700.00 | |
| 0176 | Alexander, Jess Revise RI Text/Figures/Costs | 2/2/2023 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess RI Final Review and Assembly | 2/3/2023 | 3.00 | 175.00 | 525.00 | |
| 0176 | Alexander, Jess Response to J. Glessner RI Comments - DRAFT. Conversation with Dave and Charlie | 2/7/2023 | 2.50 | 175.00 | 437.50 | |
| 0176 | Alexander, Jess RI Response to J. Glessner Comments | 2/9/2023 | .50 | 175.00 | 87.50 | |
| 0176 | Alexander, Jess RI Discussions/Review/Update | 2/13/2023 | 1.00 | 175.00 | 175.00 | |
| 0176 | Alexander, Jess Prep for meeting | 2/15/2023 | 1.00 | 175.00 | 175.00 | |
| 0176 | Alexander, Jess Mtg and Prep | 2/17/2023 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess RI Revision | 2/20/2023 | 3.00 | 175.00 | 525.00 | |
| 0176 | Alexander, Jess RI Report Redlines | 2/23/2023 | 1.00 | 175.00 | 175.00 | |
| Totals | | | 62.00 | | 13,150.00 | |
| Total Labor | | | | | | 13,150.00 |
| Total this Project | | | | | | \$13,150.00 |
| Total this Report | | | | | | \$13,150.00 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

To Pay by *Credit Card: <https://waterenvtech.com> and click on Invoice & Bid Package Pay

Page 3

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Tebbutt Declaration Exhibit 2

40



480 East Park Street | Butte, Montana 59701

Charles Tebbutt
941 Lawrence Street
Eugene, OR 97401

May 02, 2023
Project No: 2018.0088
Invoice No: 7994
Due Date: June 01, 2023

Project 2018.0088 CAFOM10 SMD/DBD Dairy

Professional Services from February 27, 2023 to April 30, 2023

Professional Personnel

| | Hours | Rate | Amount |
|-------------------------------|--------|--------|---------------------------|
| Officer/Principal | | | |
| Erickson, David | 83.25 | 250.00 | 20,812.50 |
| Senior GIS Manager | | | |
| LeProwse, Jeff | 3.00 | 150.00 | 450.00 |
| Senior I - Scientist | | | |
| Alexander, Jess | 27.00 | 175.00 | 4,725.00 |
| GIS Specialist | | | |
| Hulla, Jordan | 5.00 | 95.00 | 475.00 |
| Technician I - GIS Technician | | | |
| Kamp, Emma | 1.00 | 85.00 | 85.00 |
| Totals | 119.25 | | 26,547.50 |
| Total Labor | | | 26,547.50 |
| Total this Invoice | | | <u>\$26,547.50</u> |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

To Pay by *Credit Card: <https://waterenvtech.com> and click on Invoice & Bid Package Pay

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To Pay by ACH: Contact accounting@waterenvtech.com to set up

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| | | | | |
|---------|-----------|-----------------------|---------|------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 7994 |
|---------|-----------|-----------------------|---------|------|

Billing Backup

Wednesday, May 3, 2023

Water & Environmental Technologies, Inc.

Invoice 7994 Dated 5/2/2023

12:27:28 PM

| | | |
|---------|-----------|-----------------------|
| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy |
|---------|-----------|-----------------------|

Professional Personnel

| | | | Hours | Rate | Amount |
|-------------------|-----------------------|-----------|-------|--------|----------|
| Officer/Principal | | | | | |
| 0001 | Erickson, David | 2/27/2023 | 2.00 | 250.00 | 500.00 |
| | Disclosure | | | | |
| 0001 | Erickson, David | 2/28/2023 | 1.00 | 250.00 | 250.00 |
| | Disclosure | | | | |
| 0001 | Erickson, David | 3/1/2023 | 2.00 | 250.00 | 500.00 |
| | Disclosure | | | | |
| 0001 | Erickson, David | 3/2/2023 | 3.00 | 250.00 | 750.00 |
| | Disclosure | | | | |
| 0001 | Erickson, David | 3/6/2023 | 3.50 | 250.00 | 875.00 |
| | Disclosure drafting | | | | |
| 0001 | Erickson, David | 3/7/2023 | 2.00 | 250.00 | 500.00 |
| | Disclosure drafting | | | | |
| 0001 | Erickson, David | 3/8/2023 | 3.00 | 250.00 | 750.00 |
| | Disclosure drafting | | | | |
| 0001 | Erickson, David | 3/9/2023 | 4.00 | 250.00 | 1,000.00 |
| | Disclosure drafting | | | | |
| 0001 | Erickson, David | 3/10/2023 | 4.00 | 250.00 | 1,000.00 |
| | Disclosure drafting | | | | |
| 0001 | Erickson, David | 3/14/2023 | 1.00 | 250.00 | 250.00 |
| | Settlement document | | | | |
| 0001 | Erickson, David | 3/15/2023 | 2.00 | 250.00 | 500.00 |
| | Document Review | | | | |
| 0001 | Erickson, David | 3/16/2023 | 2.00 | 250.00 | 500.00 |
| | Settlement document | | | | |
| 0001 | Erickson, David | 3/29/2023 | 3.50 | 250.00 | 875.00 |
| | Review Expert Reports | | | | |
| 0001 | Erickson, David | 3/30/2023 | 1.50 | 250.00 | 375.00 |
| | Review Expert Reports | | | | |
| 0001 | Erickson, David | 3/31/2023 | .75 | 250.00 | 187.50 |
| | Calls and discussion | | | | |
| 0001 | Erickson, David | 4/2/2023 | 3.00 | 250.00 | 750.00 |
| | Review Hicks report | | | | |
| 0001 | Erickson, David | 4/3/2023 | 4.00 | 250.00 | 1,000.00 |
| | Call & Reburral | | | | |
| 0001 | Erickson, David | 4/4/2023 | 5.00 | 250.00 | 1,250.00 |
| | Call & Reburral | | | | |
| 0001 | Erickson, David | 4/5/2023 | 5.00 | 250.00 | 1,250.00 |
| | Call & Reburral | | | | |
| 0001 | Erickson, David | 4/10/2023 | 3.00 | 250.00 | 750.00 |
| | disclosure | | | | |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

Page 2

To Pay by *Credit Card: <https://waterenvtech.com> and click on Invoice & Bid Package Pay

*a 3% processing fee will be charged for all credit card payments

To Pay by ACH: Contact accounting@waterenvtech.com to set upWET will mail you a form to fill out. WET will **NEVER** send our banking information or ask for your banking or personal information by email.

| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | | | Invoice | 7994 |
|----------------------|--|-----------------------|------|--------|----------|------|
| 0001 | Erickson, David disclosure | 4/11/2023 | 2.00 | 250.00 | 500.00 | |
| 0001 | Erickson, David disclosure | 4/12/2023 | 4.00 | 250.00 | 1,000.00 | |
| 0001 | Erickson, David disclosure | 4/13/2023 | 3.00 | 250.00 | 750.00 | |
| 0001 | Erickson, David Settlement agreement | 4/14/2023 | 4.00 | 250.00 | 1,000.00 | |
| 0001 | Erickson, David Settlement & info for Jon | 4/17/2023 | 4.00 | 250.00 | 1,000.00 | |
| 0001 | Erickson, David Settlement & info for Jon | 4/18/2023 | 2.00 | 250.00 | 500.00 | |
| 0001 | Erickson, David Settlement & info for Jon | 4/19/2023 | 4.00 | 250.00 | 1,000.00 | |
| 0001 | Erickson, David Settlement details and discussion | 4/25/2023 | 2.00 | 250.00 | 500.00 | |
| 0001 | Erickson, David Settlement details and discussion | 4/26/2023 | 1.00 | 250.00 | 250.00 | |
| 0001 | Erickson, David Settlement details and discussion | 4/27/2023 | 1.00 | 250.00 | 250.00 | |
| 0001 | Erickson, David Settlement details and discussion | 4/28/2023 | 1.00 | 250.00 | 250.00 | |
| Senior GIS Manager | | | | | | |
| 0014 | LeProwse, Jeff de maps | 3/8/2023 | 3.00 | 150.00 | 450.00 | |
| Senior I - Scientist | | | | | | |
| 0176 | Alexander, Jess RI | 3/6/2023 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess Pilot Tech Memo Development | 3/14/2023 | 3.00 | 175.00 | 525.00 | |
| 0176 | Alexander, Jess Pilot Tech Memo Development | 3/15/2023 | 8.00 | 175.00 | 1,400.00 | |
| 0176 | Alexander, Jess New Data Review | 4/5/2023 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess CD Review | 4/17/2023 | 4.00 | 175.00 | 700.00 | |
| 0176 | Alexander, Jess CD Review | 4/18/2023 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess Final CD Review | 4/20/2023 | 1.00 | 175.00 | 175.00 | |
| 0176 | Alexander, Jess Final CD Support | 4/24/2023 | 2.00 | 175.00 | 350.00 | |
| 0176 | Alexander, Jess Final CD Support | 4/25/2023 | 1.00 | 175.00 | 175.00 | |
| 0176 | Alexander, Jess Final CD Support | 4/26/2023 | 2.00 | 175.00 | 350.00 | |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

Page 3

To Pay by *Credit Card: <https://waterenvtech.com> and click on Invoice & Bid Package Pay

*a 3% processing fee will be charged for all credit card payments

To Pay by ACH: Contact accounting@waterenvtech.com to set up

WET will mail you a form to fill out. WET will **NEVER** send our banking information or ask for your banking or personal information by email.

| Project | 2018.0088 | CAFOM10 SMD/DBD Dairy | Invoice | 7994 |
|-------------------------------|--|-----------------------|---------------------------|--------------------|
| GIS Specialist | | | | |
| 0126 | Hulla, Jordan | 3/8/2023 | 1.00 | 95.00 |
| | Figure updates | | | |
| 0126 | Hulla, Jordan | 4/25/2023 | 1.00 | 95.00 |
| | GIS Management/training | | | |
| 0126 | Hulla, Jordan | 4/27/2023 | 2.00 | 95.00 |
| | GIS Management/training/Edits to figures | | | |
| 0126 | Hulla, Jordan | 4/28/2023 | 1.00 | 95.00 |
| | GIS Figure | | | |
| Technician I - GIS Technician | | | | |
| 0191 | Kamp, Emma | 4/26/2023 | 1.00 | 85.00 |
| | Making requested changes to site location maps | | | |
| | Totals | | 119.25 | 26,547.50 |
| | Total Labor | | | 26,547.50 |
| | | | Total this Project | \$26,547.50 |
| | | | Total this Report | \$26,547.50 |

To Pay by Check: Mail to 480 E Park, Butte, MT 59701

Page 4

To Pay by *Credit Card: <https://waterenvtech.com> and click on Invoice & Bid Package Pay

*a 3% processing fee will be charged for all credit card payments

To Pay by ACH: Contact accounting@waterenvtech.com to set up

WET will mail you a form to fill out. WET will **NEVER** send our banking information or ask for your banking or personal information by email.

Exhibit 3 – Fees Incurred by Dr. Michael Russelle

INVOICE

Firm: Law Offices of Charles M. Tebbutt, PC


Attention: Marisela Taylor

Project: DBD SMD Case No: 1:19-cv-03110-TOR

Vendor: Michael P Russelle
 Research Soil Scientist
 2265 Luther Place Unit 303
 Saint Paul, MN 55108

Time period: January 4, 2023 through April 30, 2023

| TIME | Hours | Rate | Total |
|--|-------|----------|-----------------|
| Review of scientific and Extension literature | 18.0 | \$150/hr | \$2,700 |
| Litigation: Review of data from Defendants, compiling and analyzing data, writing expert report, and writing rebuttals to Stephen and Fasching opinions. | 98.0 | \$200/hr | \$19,600 |
| | | | |
| Subtotal | | | \$22,300 |
| | | | |
| REIMBURSABLE | | | |
| | | | |
| | | | |
| Subtotal | | | |
| | | | |
| TOTAL | | | \$22,300 |

Signed:  Date: May 2, 2023

[illegible]

INVOICE

Firm: Law Offices of Charles M. Tebbutt, PC


Attention: Marisela Taylor

Project: DMD/SMD Dairy Settlement

Vendor: Michael P Russelle
 Research Soil Scientist
 2265 Luther Place Unit 303
 Saint Paul, MN 55108

Time period: March 16, 2020 to March 18, 2021

| TIME | Hours | Rate | Total |
|---|-------|----------|------------------|
| Proposed field sampling sites; reviewed counteroffer, groundwater monitoring plan, soil testing results, manure application reports, and annual reports; calculated degree of phosphorus saturation by soil depth; and began compilation and review of farm reports for my Testimony. | 20 | \$200/hr | \$4000 |
| Conference calls | 4.5 | \$200/hr | \$900 |
| | | | |
| Subtotal | | | \$4900.00 |
| | | | |
| REIMBURSABLE | | | |
| | | | |
| | | | |
| Subtotal | | | |
| | | | |
| TOTAL | | | \$4900.00 |

Signed:  Date: 18 March 2021

| | | | | | | | | | | | | | | | | | | | | | | | |
|--|------|-------|---|------------|------|-------|-------------------------------------|----------|------|-------|--|-----------|------|-------|-----------------|------------------------|------|-------|-------|--------------|------|-------|--|
| Client: Law Offices of Charlie M. Tebbutts, PC | | | | | | | | | | | | | | | | | | | | | | | |
| Project: Review of Negotiated Settlement with operations in DMD/SMD case | | | | | | | | | | | | | | | | | | | | | | | |
| Daily log of hours worked by Michael P. Ruselle | | | | | | | | | | | | | | | | | | | | | | | |
| March 2020 | Date | Hours | Tasks | April 2020 | Date | Hours | Tasks | May 2020 | Date | Hours | Tasks | June 2020 | Date | Hours | Tasks | October 2020 | Date | Hours | Tasks | January 2021 | Date | Hours | Tasks |
| | 1 | | | | 1 | | Conference call 2 Rule 34 Notice | | 1 | | | | 1 | | | | 1 | | | | 1 | | |
| | 2 | | | | 2 | | | | 2 | | | | 2 | | | | 2 | | | | 2 | | |
| | 3 | | | | 3 | | | | 3 | | | | 3 | | | | 3 | | | | 3 | | |
| | 4 | | | | 4 | | | | 4 | | | | 4 | | | | 4 | | | | 4 | | |
| | 5 | | | | 5 | | | | 5 | | | | 5 | | | | 5 | | | | 5 | | |
| | 6 | | | | 6 | | | | 6 | | | | 6 | | | | 6 | | | | 6 | 1 | Inventoried the files I had |
| | 7 | | | | 7 | | | | 7 | | Proposed, reviewed, and approved field 2 sampling sites | | 7 | | | | 7 | | | | 7 | | |
| | 8 | | | | 8 | | | | 8 | | | | 8 | | | | 8 | | | | 8 | 1 | Phone call with Lawyer |
| | 9 | | | | 9 | | | | 9 | | | | 9 | | | | 9 | | | | 9 | | |
| | 10 | | | | 10 | | | | 10 | | | | 10 | | | | 10 | | | | 10 | | |
| | 11 | | | | 11 | | | | 11 | | | | 11 | | | | 11 | | | | 11 | 4 | Downloaded about 30 files, reviewed several, and found that several were incomplete |
| | 12 | | | | 12 | | | | 12 | 1 | Conference call | | 12 | | | | 12 | | | | 12 | 2 | Received and reviewed the MPPP files for both dairies; acquired daily weather data for calculating leached N. |
| | 13 | | | | 13 | | | | 13 | | | | 13 | | | | 13 | | | | 13 | 5 | Finished initial review of the downloaded files, began summarizing manure application data, and reported missing data and mislabing problems in numerous files |
| | 14 | | | | 14 | | | | 14 | | | | 14 | | | | 14 | | | | 14 | | |
| | 15 | | | | 15 | | | | 15 | | | | 15 | 0.5 | Conference call | | 15 | | | | 15 | | |
| | 16 | | | | 16 | | | | 16 | | | | 16 | | | | 16 | | | | 16 | | |
| | 17 | | | | 17 | | | | 17 | | | | 17 | | | | 17 | | | | 17 | | |
| | 18 | | | | 18 | | | | 18 | | | | 18 | | | | 18 | | | | 18 | | |
| | 19 | | | | 19 | | | | 19 | | | | 19 | | | | 19 | | | | 19 | | |
| | 20 | | | | 20 | | | | 20 | | | | 20 | | 1 | Reviewed data files | | | | | 20 | | |
| | 21 | | | | 21 | | | | 21 | | | | 21 | | | | 21 | | | | 21 | | |
| | 22 | | | | 22 | | | | 22 | | | | 22 | | | | 22 | | | | 22 | | |
| | 23 | | | | 23 | | | | 23 | | | | 23 | | | | 23 | | | | 23 | | |
| | 24 | | | | 24 | | | | 24 | | | | 24 | | | | 24 | | | | 24 | | |
| | 25 | | | | 25 | | | | 25 | | | | 25 | | | | 25 | | | | 25 | | |
| | 26 | | | | 26 | | | | 26 | | Reviewed deep soil core data; calculated degree 3 of P saturation | | 26 | | | | 26 | | | | 26 | | |
| | 27 | | | | 27 | | | | 27 | | | | 27 | | | | 27 | | | | 27 | | |
| | 28 | | | | 28 | | | | 28 | | | | 28 | | | | 28 | | | | 28 | | |
| | 29 | | | | 29 | | | | 29 | | | | 29 | | | | 29 | | | | 29 | | |
| | 30 | | | | 30 | | | | 30 | | | | 30 | | | | 30 | | | | 30 | | |
| | 31 | | Reviewed Counteroffer, GW monitoring plan, and related farm 2 records | | | | | | 31 | | | | 31 | | | | 31 | | | | 31 | | |
| Total | 2 | | | | 2 | | | | 3 | | | | 3 | | | | 1.5 | | | | 13 | | 24.5 |

INVOICE

Firm: Law Offices of Charles M. Tebbutt, PC


Attention: Marisela Taylor

Project: DMD/SMD Dairy Settlement

Vendor: Michael P Russelle
 Research Soil Scientist
 2265 Luther Place Unit 303
 Saint Paul, MN 55108

Time period: November 2019 to March 15, 2020

| TIME | Hours | Rate | Total |
|--|-------|----------|------------------|
| Reviewing soil testing results and annual reports; updating literature review on phosphorus leaching in calcareous soils; summarizing my suggestions for settlement on both nitrogen and phosphorus. | 16 | \$100/hr | \$1600 |
| Conference calls | 2 | \$100/hr | \$200 |
| | | | |
| Subtotal | | | \$1800.00 |
| | | | |
| REIMBURSABLE | | | |
| | | | |
| | | | |
| Subtotal | | | |
| | | | |
| TOTAL | | | \$1800.00 |

Signed:  Date: 12 March 2020

| | | | | | | | | | | | | | | | | | |
|--|-------|-------|-----------------------------|---------------|------|-------|---|--------------|------|-------|----------------------------------|---------------|------|-------|---|------------|------|
| Client: Law Offices of Charlie M. Tebbutts, PC | | | | | | | | | | | | | | | | | |
| Project: Review of Negotiated Settlement with operations in DMD/SMD case | | | | | | | | | | | | | | | | | |
| Daily log of hours worked by Michael P. Russelle | | | | | | | | | | | | | | | | | |
| November 2019 | Date | Hours | Tasks | December 2019 | Date | Hours | Tasks | January 2020 | Date | Hours | Tasks | February 2020 | Date | Hours | Tasks | March 2020 | Date |
| | 1 | | | | 1 | | | | 1 | | | | 1 | | | | 1 |
| | 2 | | | | 2 | | | | 2 | | | | 2 | | | | 2 |
| | 3 | | | | 3 | 3 | Reviewed files from DMD & SMD; maps of nitrate leaching potential | | 3 | | | | 3 | | | | 3 |
| | 4 | | | | 4 | 1 | conference call | | 4 | | | | 4 | | | | 4 |
| | 5 | | | | 5 | | | | 5 | | | | 5 | | | | 5 |
| | 6 | | | | 6 | | | | 6 | | | | 6 | | | | 6 |
| | 7 | | | | 7 | | | | 7 | 2 | Revised recommendations | | 7 | 1 | Reviewed and edited correspondence with DMD/SMD | | 7 |
| | 8 | | | | 8 | | | | 8 | 1 | updated sampling recommendations | | 8 | | | | 8 |
| | 9 | | | | 9 | | | | 9 | | | | 9 | | | | 9 |
| | 10 | | | | 10 | | | | 10 | | | | 10 | | | | 10 |
| | 11 | | | | 11 | | | | 11 | | | | 11 | | | | 11 |
| | 12 | | | | 12 | | | | 12 | | | | 12 | | | | 12 |
| | 13 | 2 | reviewed reports and letter | | 13 | | | | 13 | | | | 13 | | | | 13 |
| | 14 | | | | 14 | | | | 14 | | | | 14 | | | | 14 |
| | 15 | 1 | conference call | | 15 | | | | 15 | | | | 15 | | | | 15 |
| | 16 | | | | 16 | | | | 16 | | | | 16 | | | | 16 |
| | 17 | | | | 17 | 2 | literature update | | 17 | | | | 17 | | | | 17 |
| | 18 | | | | 18 | | | | 18 | | | | 18 | | | | 18 |
| | 19 | | | | 19 | | | | 19 | | | | 19 | | | | 19 |
| | 20 | | | | 20 | 3 | Recommendations on sampling and analysis | | 20 | | | | 20 | | | | 20 |
| | 21 | | | | 21 | | | | 21 | | | | 21 | | | | 21 |
| | 22 | | | | 22 | | | | 22 | | | | 22 | | | | 22 |
| | 23 | | | | 23 | | | | 23 | | | | 23 | | | | 23 |
| | 24 | | | | 24 | | | | 24 | | | | 24 | | | | 24 |
| | 25 | | | | 25 | | | | 25 | | | | 25 | | | | 25 |
| | 26 | | | | 26 | | | | 26 | | | | 26 | | | | 26 |
| | 27 | | | | 27 | | | | 27 | | | | 27 | | | | 27 |
| | 28 | | | | 28 | | | | 28 | | | | 28 | | | | 28 |
| | 29 | | | | 29 | 2 | Review of sampling results and recommendations | | 29 | | | | 29 | | | | 29 |
| | 30 | | | | 30 | | | | 30 | | | | | | | | 30 |
| | | | | | 31 | | | | 31 | | | | | | | | 31 |
| | Total | 3 | | | | 9 | | | 5 | | | | 1 | | | 0 | 18 |

Exhibit 4 – Fees Incurred by Dr. Keeve Nachman

INVOICE FOR PROFESSIONAL SERVICES

Payment is requested in the amount of: \$3,600

Please remit to:

Keeve Nachman, PhD, MHS
7104 Central Avenue
Takoma Park, MD 20912

SSN/Tax ID: 230-21-6319

Phone Number: 443-803-1739

Services:

| Date | Hours | Activity |
|-----------|---------|---|
| 1/3/2023 | 1 | Meeting |
| 1/16/2023 | 2 | Document review and editing re: RSL report |
| 1/17/2023 | 1 | Meeting |
| 1/29/2023 | 4 | Preparation of notes regarding nitrate reevaluation |
| 1/30/2023 | 1 | Meeting |
| 1/31/2023 | 0.5 | Correspondence with EPA |
| 2/10/2023 | 2 | Document review and editing re: Nachman report |
| 2/13/2023 | 1 | Meeting |
| 2/22/2023 | 2 | Document review and editing re: Nachman report |
| 3/6/2023 | 1.5 | Document review and editing re: Nachman report |
| 3/9/2023 | 0.5 | Document review and editing re: Nachman report |
| 4/13/2023 | 1.5 | Meeting |
| Total hrs | 18 | |
| Rate/hr | \$200 | |
| Total | \$3,600 | |



(04/20/2023)

Exhibit 5 – Excerpt from J. Glessner Deposition

1 Q. Okay. And what did you do to comply with the
2 document requests in the Subpoena?

3 A. Went through my emails and documents I have.

4 Q. When you say you went through your emails, how
5 far back did you go to review your emails?

6 A. Whatever I still had. I mean, I don't know. I
7 mean, I guess I put a search in on different subjects
8 and whatever pulled up.

9 Q. Okay. What search terms did you use? Did you
10 have a list -- well, let me rephrase that. Did you have
11 a list of search terms that you used?

12 A. Well, I would have used probably people's names
13 and that type of thing.

14 Q. Okay. I'm asking you whether you had a list of
15 search terms, of written search terms that you used.

16 A. (No response).

17 Q. Do you understand my question? Did you
18 understand my question, Mr. Glessner?

19 A. Yeah. I thought I answered it.

20 Q. No. I asked whether -- if you did, I didn't
21 hear it. This may be a problem with the Zoom. This is
22 our first time doing a Zoom. So if there are some
23 issues, we'll try to figure them out.

24 So I'll repeat my question. Did you have a
25 written list of search terms?



1 A. No. I just put them in as I thought them.

2 Q. Okay. Did you write down what your search terms
3 were?

4 A. No.

5 Q. Did you confer with your counsel about what the
6 search terms should be?

7 A. No.

8 Q. Did you review any phone records?

9 A. No.

10 Q. Did you review your text messages?

11 A. I don't keep any text messages.

12 Q. When you say you don't keep them, what do you
13 do?

14 A. Delete them.

15 Q. As soon as you send them, do you delete them?

16 A. I delete them daily.

17 Q. All text messages on your phone?

18 A. Yes.

19 Q. And how long have you done that?

20 A. Probably ever since I've been texting. I don't
21 know how many years, ten, 20 years.

22 Q. How much time did you spend preparing for this
23 deposition?

24 A. Flew in here yesterday. I came in here before
25 when I thought we were supposed to have it, I don't



Exhibit 6 – October 23, 2020 Correspondence

CARE, et al. v. DBD, et al.

Charlie Tebbutt <Charlie@tebbuttlaw.com>

Fri 10/23/2020 2:52 PM

To: Stephen J. Odell <sodell@martenlaw.com>; Jeff B. Kray <jkray@martenlaw.com>

Cc: Jon Frohnmayer <jon@tebbuttlaw.com>; Daniel Snyder <Dan@tebbuttlaw.com>; Andrea Rodgers-Harris <andrearodgers42@gmail.com>; Toby Marshall <tmarshall@terrellmarshall.com>; Blythe Chandler <BChandler@terrellmarshall.com>

 4 attachments (759 KB)

2020.10.23 Cummings Depo Notice.pdf; Cummings Subpoena.pdf; 2020.10.23 Glessner Depo Notice.pdf; Glessner Subpoena.pdf;

Dear Counsel,

In our October 14, 2020 correspondence concerning case management, we requested that you provide us three dates between October 14 and 23 wherein a follow-up Rule 37 conference may be held regarding Defendants' June 5, 2020 Rule 37 response letter. We have tried to confer in good faith as required by the local rules, but you have provided no such dates in your emails back to us. Failure to respond to such requests prejudices Plaintiffs ability to meet the scheduling order recently agreed upon by the parties.

We also requested that you promptly supplement your prior discovery responses and confirm, in writing, whether specific information was provided to Plaintiffs. We asked you to provide such supplementation and confirmation within five days from the date of our October 14 correspondence. You have neither provided the requested information nor provided a date for production.

Plaintiffs further requested that you identify three timeframes, each lasting three consecutive days, in which Defendants' facilities would be available for the continuation and conclusion of Plaintiffs' Rule 34 inspection. No such timeframes have been provided.

While Plaintiffs remain open to settling this matter, Defendants have not proffered timely responses to our settlement exchanges, resulting in an unreasonable elongation of our settlement window. During the status call with Judge Suko on October 14, you specifically asked for a one week stay of action in order to provide an updated settlement response. While plaintiffs did not agree with that proposal, more than a week has passed without any substantive response. At this juncture, given Defendants' consistent tardiness, Plaintiffs must proceed with preparing their case for trial under the recently agreed upon schedule. Time is of the essence.

Consequently, Plaintiffs hereby renew the requests made in our October 14, 2020 correspondence and reiterate our request for overdue substantive responses. We must address outstanding discovery issues and obtain dates on which Plaintiffs may continue their Rule 34 inspection. Further failures to respond to these requests will be construed as a failure to cooperate in discovery and will result in motion practice before Judge Rice.

Furthermore, attached for service please find deposition notices and subpoenas duces tecum for Messrs. Cummings and Glessner, presently scheduled for November 9 and 10, respectively. We have accommodated your concerns about Mr. Cummings and agree to take his deposition remotely by Zoom. We request that Mr. Glessner's deposition take place in person. As you are relatively new to the case (even though you are in the same firm), Plaintiffs attempted to confer about deposition dates on May 28, with your team's response on June 2, so the request for

Tebbutt Declaration Exhibit 6

depositions is not new (I will forward the email string separately for your convenience). The June settlement discussions resulted in the tabling of deposition dates, but it is now time to set dates. Due to COVID-19 state restrictions, the court reporting service has informed us of the rules, which are mentioned in the notice. Please confirm that you are accepting service, reserving rights of course, of the notices and subpoenas on behalf of the two individuals.

We look forward to working with you to get things scheduled. Along those lines, I tried reaching you by phone earlier today and left a voicemail. Please tell us your availability on Monday or Tuesday to confer by phone to try to resolve these outstanding matters. Thank you.

Charlie Tebbutt
Law Offices of Charles M. Tebbutt, P.C
941 Lawrence St.
Eugene, OR 97401
Ph: 541-344-3505
Fax: 541-344-3516
Website: <http://charlietebbutt.com>

Exhibit 7 – December 23, 2020 Correspondence

Law Offices of Charles M. Tebbutt, P.C.
941 Lawrence Street
Eugene, OR 97401
Ph: 541-344-3505 | Fax: 541-344-3516

December 23, 2020

Jeff B. Kray
Marten Law
1191 Second Ave., Suite 2200
Seattle, WA 98101

Steve J. Odell
Marten Law
1050 SW 6th Ave., Suite 2150
Portland, OR 97204

Via E-mail to:
jkray@martenlaw.com

Via E-mail to:
sodell@martenlaw.com

**RE: *CARE ET AL. V. DBD WASHINGTON, LLC ET AL.* – LETTER
CONCERNING SPOILIATION & PRESERVATION OF EVIDENCE**

Dear Counsel:

This letter serves as Plaintiffs' attempt to partially redress the significant discovery violations committed by Defendants and their counsel. If Defendants do not adequately and timely cure these errors in the manner described below, then Plaintiffs will file a motion seeking monetary and evidentiary sanctions, including appropriate adverse inferences. Please provide Defendants' response to this letter no later than January 6, 2021. Time is of the essence.

Based on the depositions of Messrs. Glessner and Cummings, Plaintiffs identify the following sanctionable conduct:

1. Inadequate Supervision of Discovery. During deposition, Mr. Glessner testified that he was effectively left to his own devices in responding to Plaintiffs' discovery. He came up with his own search terms and did not confer with Defense counsel about what those terms should be. Glessner Dep. 12:1-7. Mr. Cummings likewise was placed in charge of responding to discovery, but was not provided search terms by counsel or guidance on how to collect documents and, indeed, Mr. Cummings stated that he did not use any search terms. Cummings Dep. 12:22-13:8. Defense counsel has a duty under Fed. R. Civ. P. 26(g) to conduct a reasonably thorough investigation of Defendants' records and to inform Defendants of the need to preserve electronically stored information. Defense counsel certifies they made such an effort by signing their name to discovery responses. Sanctions for such improper certifications are mandatory. *See, e.g., Brown v. Tellermate Holdings Ltd.*, 2014 U.S. Dist. LEXIS 90123 (S.D. Ohio July 1, 2014).

2. Spoliation of Evidence and Failure to Preserve Electronically Stored Information. Mr. Glessner testified that he communicates daily with employees at DBD and SMD dairies via text messaging. Glessner Dep. 24:6-14. Mr. Glessner also exchanged texts with the Washington Department of Agriculture. *Id.* at 169:4-8. Mr. Glessner testified that he deletes all of his text messages daily. *Id.* at 13:10-21. Mr. Glessner also deletes email communications from the dairies that, in his view, “has accumulative manure stuff on it[.]” *Id.* at 59:4-15. Mr. Cummings testified that he has not created a folder to save emails for this litigation and deletes emails that he believes “doesn’t matter to me,” including emails concerning business dealings at the dairies. Cummings Dep. 88:1-89:5. More concerning, Mr. Cummings testified that he communicates with Mr. Glessner, Daniel Chavarin, and Karina Chavarin about the dairies via email, but to date Plaintiffs have received no emails in discovery that are to or from Mr. Cummings’s email account. *Id.* 11:10-12. Indeed, Mr. Cummings testified that his “record retention policy” during this litigation was that “after I deal with an email, I throw it in the trash and the program only retains a few months of emails before it wipes them out.” *Id.* 87:22-25. Courts retain discretion in fashioning the type of sanction for this conduct under Rule 37(e).

3. Lack of a Litigation Hold. Mr. Glessner testified that he did not recall receiving a litigation hold letter from Defendants’ counsel. Glessner Dep., 58:10-60:22. Mr. Cummings testified similarly. Cummings Dep., 10:22-25. Defendants and their counsel have a duty under the federal rules to preserve evidence, including electronically stored information. As Judge Rice put it, “[a]s soon as a potential claim is identified, a litigant is under a duty to preserve evidence which it knows or reasonably should know is relevant to the action.” *Belew-Nyquist v. Quincy Sch. Dist. No. 144*, No. 2:19-CV-0215-TOR, 2020 U.S. Dist. LEXIS 218102, at *32 (E.D. Wash. Nov. 20, 2020) (quoting *In re Napster, Inc. Copyright Litig.*, 462 F. Supp. 2d 1060, 1067 (N.D. Cal. 2006)). Defendants have been on notice since at least February 8, 2019, that Plaintiffs intended to initiate legal action against Defendants under the Resource Conservation and Recovery Act.

The above is only an part of the significant discovery failures testified to during the Glessner and Cummings depositions. As you know, Defendants have also failed to respond to written discovery in a timely and complete manner, which has still yet to be cured. *See*, most recently, Plaintiffs’ December 1, 2020 Correspondence.

To ensure Defendants timely and adequately cure aspects of these specific discovery failures, Plaintiffs demand the following actions be taken:

- 1) Defendants shall produce to Plaintiffs a complete copy of any and all litigation hold letters, emails, or other records, from January 1, 2019 to December 4, 2020. If no such letters, emails, or other records exist, then Defendants shall inform

Plaintiffs of that fact in writing, signed by all Defense counsel that currently represent Defendants.

- 2) Defendants shall produce to Plaintiffs a complete copy of any and all litigation hold letters, emails, or other records, from December 5, 2020 to the present. Mr. Odell represented to Mr. Tebbutt on December 14 that a litigation hold letter had now been provided to representatives of the Defendants. Such letters are discoverable, and privilege is waived, when there is a preliminary showing of spoliation. *See, e.g., City of Colton v. Am. Promotional Events, Inc.*, 2011 U.S. Dist. LEXIS 163984, at *236-37 (C.D. Cal. Nov. 22, 2011).
- 3) Defendants shall immediately retain the services of a national and reputable ESI vendor. That vendor shall conduct exhaustive searches of all of Defendants'¹ information technology infrastructure, including but not limited to computers, laptops, cell phones (including Messrs. Glessner and Cummings's phones), cameras, cloud-based computing programs, social media, email accounts, and the like. Defendants shall provide to Plaintiffs a list of search terms used by the vendor to accomplish this search. The search terms shall be representative of all discovery served by Plaintiffs to date, including subpoenas duces tecum served on Messrs. Glessner and Cummings. Defendants shall also provide to Plaintiffs a report from the ESI vendor outlining:
 - a. The custodians of information where searches occurred;
 - b. When searches occurred;
 - c. Where searches occurred within each distinct piece of information technology, e.g., cell phone, laptop, etc.;
 - d. How searches occurred, including the methodology used, the time and length over which it took place, and the person conducting the search;
 - e. The number of responsive "hits" returned for each search term;
 - f. Whether information deleted by Messrs. Cummings and Glessner was able to be retrieved and, if so, the volume of information retrieved.
- 4) Complete, Bates-stamped documents shall be produced on a *weekly* rolling basis as documents are processed by the ESI vendor.
- 5) A stipulation from Defendants that they will consent to moving the deadline to add or amend parties to April 7, 2021. This stipulation is necessary because of the consistent delays in producing records and Defendants' failure to comply with their discovery obligations, which have unnecessarily elongated the discovery phase of this case and prevented Plaintiffs from obtaining relevant evidence.

¹ This expressly includes Washington Dairy Holdings, LLC and Washington Agri-Investments, LLC. Plaintiffs will be moving to add these entities back into the litigation, as well as other DeCoster-controlled entities. A supplemental notice letter to other related LLCs is forthcoming.

Defendants failed to take appropriate and necessary steps to fulfill their discovery obligations in this case, leading to an untold number of destroyed records, incomplete discovery responses, and unsupervised discovery searches. The transcripts indicate that multiple records were not produced. Plaintiffs will provide a separate letter addressing these related failures. The sanctions for such conduct, both monetary and evidentiary, are severe. The degree to which Defendants correct these errors will directly influence the type and size of sanctions sought by Plaintiffs.

Finally, we request that Defendants revise their privilege log and produce non-privileged material. For instance, Mr. Glessner identified an employee at Ida-Beef, Ms. Gladys Ruiz, as one of the recipients of allegedly privileged material. Glessner Dep. 173:16-23. Mr. Glessner could not identify why Ms. Ruiz would be on allegedly protected settlement communications, *id.*, and later Mr. Odell stated that document “may have been inadvertently included” in the log. Similar testimony was provided about Jas Martinez and Angel Golob. Plaintiffs request Defendants produce an amended log by January 6, 2021, and that Defendants specifically highlight material Defendants are withholding on the grounds that it contains environmental sampling.

We look forward to your responses, including the measures I discussed with Mr. Odell on December 14. Happy Holidays!

Sincerely,

/s/ Charles M. Tebbutt
Charles M. Tebbutt
charlie@tebbuttlaw.com

Counsel for Plaintiffs

Cc: Co-Counsel and Clients

Exhibit 8 – Belin McCormick Email Exchange

RE: CARE, et al., v. DBD, LLC, et al., 1:19-cv-03110-TOR (E.D. WA)

David L. Charles <dlcharles@belinmccormick.com>

Fri 4/22/2022 1:00 PM

To: Charlie Tebbutt <Charlie@tebbuttlaw.com>

Cc: Jon Frohnmayer <jon@tebbuttlaw.com>; Daniel Snyder <Dan@tebbuttlaw.com>

Charlie: Thanks for the call. You do have my permission to return the call. Your understanding is correct. Have a good weekend. dlc

From: Charlie Tebbutt <Charlie@tebbuttlaw.com>

Sent: Friday, April 22, 2022 2:57 PM

To: David L. Charles <dlcharles@belinmccormick.com>

Cc: Parker Jones <parker@tebbuttlaw.com>; Daniel Snyder <Dan@tebbuttlaw.com>

Subject: Re: CARE, et al., v. DBD, LLC, et al., 1:19-cv-03110-TOR (E.D. WA)

David- thank you for taking my call just now. John Glessner, your client, has called my office twice today. Before calling him back I contacted you asking whether I have permission to speak to him directly. You indicated that I do have permission to speak with him. Please confirm that my understanding is correct. Thank you.

Charlie Tebbutt
Law Offices of Charles M. Tebbutt, P.C
941 Lawrence St.
Eugene, OR 97401
Ph: 541-344-3505
Fax: 541-344-3516
Website: <http://charlietebbutt.com>

From: David L. Charles <dlcharles@belinmccormick.com>

Sent: Thursday, December 23, 2021 7:33 AM

To: Charlie Tebbutt <Charlie@tebbuttlaw.com>

Cc: Jeff Kray <jkray@martenlaw.com>; Volpe, Frank R. <fvolpe@sidley.com>; Fradette, Jacquelyn E <jfradette@sidley.com>; Lawson E. Fite <lfite@martenlaw.com>; Marina V. Goodrich <mgoodrich@martenlaw.com>; Daniel Snyder <Dan@tebbuttlaw.com>; Parker Jones <parker@tebbuttlaw.com>; andrearodgers42@gmail.com <andrearodgers42@gmail.com>; Toby Marshall <tmarshall@terrellmarshall.com>; Blythe Chandler <bchandler@terrellmarshall.com>

Subject: RE: CARE, et al., v. DBD, LLC, et al., 1:19-cv-03110-TOR (E.D. WA)

Mr. Talbutt: Sorry for the delay in responding further. Mr. Glessner has been traveling out of the country and forgot his cell phone. (Some of us, having been born long before the device came into common use, still recall a time we had peace and quiet. I know when backpacking, camping or hunting I virtually always 'forget' my cell phone. Nice to recall when we were not reachable 24 hours a day but John tells me in this case he was not following my practice.)

I did discuss the situation with him this morning. A couple of points: You ask whether he will turn over his devices. He will not. When that issue arose, I asked how counsel for DBD could ensure that everything on the devices, most of which I presume has nothing to do with DBD and some of which would be privileged communication with counsel would be secure. That is a particular concern to my

client since he is now in litigation with Mr. DeCoster regarding nonpayment of a promissory notes and other debts Mr. DeCoster promised to pay. It is fair to say the relationship is adversarial and the view on this side of the table is that DeCoster does or is in a position to control DBD. I was not provided any response to that inquiry.

Several other points are relevant in our view. First, Mr. Glessner was not compensated for his DBD work, is not involved with DBD in anyway and does not trust that any future promised to pay for expenses or time would be kept. (We asked for money to be paid upfront to be kept in my trust account to compensate for time and expenses incurred for that very reason when approached the first time. That was refused.)

Second, Mr. Glessner does not believe that there is anything unique with respect to DBD on his devices. He believes everything there can be collected from others with closer and likely current involvement with DBD or Mr. DeCoster. Those include DBD principals and employees (should be on DBD server or whatever it is that all DBD emails had to pass through) and Wayne Cummings or Larry Schuler. All of whom we believe would be compensated for their time and expense in responding to document requests.

Third, Mr. Glessner has need for his devices to conduct business.

If you have questions, please let me know. In the meantime, I wish you the best for a relaxing and safe holiday season.

dlc

From: Charlie Tebbutt <Charlie@tebbuttlaw.com>
Sent: Monday, December 13, 2021 6:10 PM
To: David L. Charles <dlcharles@belinmccormick.com>
Cc: Jeff Kray <jkray@martenlaw.com>; Volpe, Frank R. <fvolpe@sidley.com>; Fradette, Jacquelyn E <jfradette@sidley.com>; Lawson E. Fite <lfite@martenlaw.com>; Marina V. Goodrich <mgoodrich@martenlaw.com>; Daniel Snyder <Dan@tebbuttlaw.com>; Parker Jones <parker@tebbuttlaw.com>; andrearodgers42@gmail.com; Toby Marshall <tmarshall@terrellmarshall.com>; Blythe Chandler <bchandler@terrellmarshall.com>
Subject: CARE, et al., v. DBD, LLC, et al., 1:19-cv-03110-TOR (E.D. WA)

Dear Mr. Charles- we have been informed that you now represent John Glessner. Mr. Glessner possesses documents located on his phone and computer with respect to his involvement with the operations in the above federal action. Mr. Glessner's deposition was taken about one year ago during which time it was discovered that he has withheld documents relevant to this case. As part of the agreement to cure the spoliation, Mr. Kray's office, on behalf of the Defendants then in the case, agreed to search the relevant computers and phones of individuals identified who had responsive documents. Please advise whether Mr. Glessner will produce the devices to DBD's lawyer required for search in the matter. If you would like to discuss this matter further by phone, please let us know of your availability. We look forward to your response. Thank you- Charlie Tebbutt

Charlie Tebbutt
Law Offices of Charles M. Tebbutt, P.C
941 Lawrence St.
Eugene, OR 97401
Ph: 541-344-3505
Fax: 541-344-3516
Website: <http://charlietebbutt.com>

Exhibit 9 – Correspondence from Gov. Inslee’s Office

Fw: Hazardous material site investigation

Charlie Tebbutt <Charlie@tebbuttlaw.com>

Tue 4/28/2020 10:15 PM

To: Daniel Snyder <Dan@tebbuttlaw.com>

Cc: andrearodgers42@gmail.com <andrearodgers42@gmail.com>; Blythe Chandler <BChandler@terrellmarshall.com>; Jon Frohnmayer <jon@tebbuttlaw.com>

A prompt and helpful response. I'll deal with DBD tomorrow.

Charlie Tebbutt
Law Offices of Charles M. Tebbutt, P.C.
941 Lawrence St.
Eugene, OR 97401
Ph: 541-344-3505
Fax: 541-344-3516
Website: <http://charlietebbutt.com>

From: Sanchez, Alejandro (GOV) <Alejandro.Sanchez@gov.wa.gov>

Sent: Tuesday, April 28, 2020 7:46 PM

To: Charlie Tebbutt <Charlie@tebbuttlaw.com>

Cc: Parker Jones <parker@tebbuttlaw.com>

Subject: RE: Hazardous material site investigation

Thank you for your inquiry, Mr. Tebbutt:

I agree that your proposed activity is essential, finding support in the Food and Agriculture, Water and Wastewater, and Other Community-Based Government Operations and Essential Functions sectors. Together, they permit agricultural operations, environmental remediation, and litigation-related work, all of which are apt here.

Please note that this determination could change if circumstances so require, but to the extent your safety plan sits in harmony with the guidance set forth by the CDC, OSHA, L&I, and DOH, you will be operating consistently with Proclamation 20-25.

Best regards,
Alejandro

From: Charlie Tebbutt <Charlie@tebbuttlaw.com>

Sent: Tuesday, April 28, 2020 7:26 PM

To: Sanchez, Alejandro (GOV) <Alejandro.Sanchez@gov.wa.gov>

Cc: Parker Jones <parker@tebbuttlaw.com>

Subject: Hazardous material site investigation

Hello Mr. Sanchez- I am seeking clarification on whether a project of ours is considered "essential" in these uncertain times. My clients, CARE, Center for Food Safety and Friends of Toppenish Creek, have a case in federal court in the Eastern District of Washington against a dairy in the Lower Yakima Valley. The case alleges that the dairy is causing an imminent and substantial endangerment to public health and the environment pursuant to the Resource Conservation and Recovery Act, 42 U.S.C. 6972. Leaking lagoons, overapplied fields, compost on bare ground, and other problems are causing nitrate contamination of drinking water

supplies for thousands of Washingtonians. The facts are nearly identical to the *CARE v Cow Palace* case where Chief Judge Thomas Rice found that the dairies were causing an imminent and substantial to public health and the environment. That case was decided in 2015.

We are scheduled to perform soil sampling on the facilities from May 12-15. We will take core samples from fields, around manure pits, animal pens, and compost areas (as much as 30 acres of compost area). We have a COVID-19 safety plan and will be maintaining social distancing while doing the work. The plan is collect data for the case that was filed nearly a year ago. While we are fully aware of the COVID-19 threat and are taking safety issues into account, there remains a present health threat to the people of the Lower Yakima Valley. The lawsuit is intended to alleviate that threat and we ask for clarification that this task, which will take 3-4 days, is acceptable under the present orders.

The people who are conducting the work will be staying in separate rooms in a facility that will not have been used for many weeks before we stay there. Please let us know that we are within the standards set for the times. If you have any questions or need further information, please contact me either by email or at 541-285-3717. Time is somewhat of the essence, so I thank you for your attention to this matter.

Charlie Tebbutt
Law Offices of Charles M. Tebbutt, P.C
941 Lawrence St.
Eugene, OR 97401
Ph: 541-344-3505
Fax: 541-344-3516
Website: <http://charlietebbutt.com>

Exhibit 10 – Excerpt from March 10, 2023 D. Erickson Expert Report

according to the application fields where the composite samples were collected. Each field was sampled across the complete area by dividing the field into 50-100 subareas and selecting up to 10 subareas randomly and sampling four or more locations. These locations were composited on 1-foot intervals and submitted to the laboratory for analysis. Knowledge of irrigation practices in the field was used to randomize the samples. In fields DBD-3C and 3B, since the crop was still growing, samples were collected along a thin strip that was mowed while WET was on-site.

37. The WET soil data generally shows overapplication of manure to the fields, with elevated nitrate and total nitrogen extending below the root zone in the field. For example, the sites DBD-1C-176 (44 mg/kg), DBD-2EB-139 (45 mg/kg), SMD-01-176 (24 mg/kg), and SMD-FIELD01-32 (25 mg/kg) all show high concentrations of nitrates at a depth below five feet. In many cases, these elevated concentrations extend to groundwater, which is very shallow on these two facilities: around 10 feet on the northern fields and 3-5 feet below ground surface on the southern SMD fields. These shallow depths contrast with the significantly deeper groundwater depths underneath the testing locations for Cow Palace and the “Cluster” Dairies, which were greater than 100 feet on the northern areas and around 30 feet in the southern fields. The close proximity between soil with elevated nitrate and

groundwater is direct evidence of groundwater contamination due to overapplication of manure.

38. Moreover, as mentioned above, because the soil at the Dairies permits very limited denitrification, we should also be concerned about nitrate concentrations even within the root zone. In fields where crops are planted every year and the field is tilled, the root zone may only be present in the top 6” of soil. And, indeed, we observe extremely high levels of nitrate concentrations in that 1-foot zone. For example, we see 110 mg/kg within the first foot at DBD-1C-176, 86 mg/kg within the first foot at DBD-2EB-139, and 370 mg/kg within the first foot at DBD-3C-139.

39. More concerning, and direct evidence of nitrate leaching to groundwater, is the high concentration of nitrate throughout the soil column. DBD-3C shows concentration in the 170 to 240 mg/kg range all the way through the soil column.

40. The heifer pens south of SMD have been observed with ponded water on top of the manure multiple times over the last several years. Efforts to contour and slope the area have been made by the dairy, mainly by creating manure mounds in the pens. Infiltration of precipitation remains an issue resulting in soil and groundwater contamination beneath the heifer pens. Soil Samples SMD-H1 and SMD-H2 were collected in the pens; both samples

show infiltration of nitrate and ammonia through the soil column and into groundwater. Groundwater was encountered at the bottom of both sample cores. Based on sampling of mounds at other dairies, the mounds are also a likely continuing source of nitrogen loading to groundwater.



41. In areas where groundwater was encountered, WET collected a groundwater sample from the downgradient edge of the field. These samples are shown as the first four data points in Exhibit C.

39. These data provide a good example of the cumulative effects of overapplication. While the upper field shows concentrations of nitrate in groundwater from overapplication in the 5-7 mg/L range in addition to ammonia in the groundwater, the lower field shows concentrations as high

as 29.1 mg/l, or almost three times the maximum contaminant level standard. These data collected along groundwater flowpaths represent cumulative effects from a constant uniform nitrate load to groundwater as it flows under several fields. Overapplication at several fields results in increasing groundwater contaminant concentration along the groundwater flow direction. Simply, groundwater concentrations are only slightly impacted where groundwater enters the property from the North. By the time groundwater flows under the field, lagoons and source areas on DBD and SMD, groundwater is contaminated above drinking water standards, indicating that the operations at DBD and SMD are directly impacting groundwater quality under the Dairy property. Groundwater is severely impacted after flowing under the Dairies, and then flows off-site downgradient to impact other private properties and groundwater supply wells. Figure 2 shows these groundwater flowpaths across the Dairy and onto surrounding properties.

b. Farallon Investigation

42. Farallon conducted an investigation of both groundwater and soil in June of 2021, which WET oversaw, and DBD re-tested the groundwater in November 2022. Farallon collected soil samples from monitoring well borings around the lagoons and the facility. Farallon's soil data is in Exhibit

Exhibit 11 – August 14, 2023 Letter from Ecology



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600, Olympia, WA 98504-7600 • 360-407-6000

August 14, 2023

Water & Environment Technologies
480 East Park Street
Butte, Montana 59701
Sent by email only: jalexander@waterenvtech.com

RE: DBD Washington & SMD, Inc. Dairies Remediation Investigation

Dear Jess Alexander,

Ecology staff have reviewed the Remediation Investigation Plan proposal submitted by WET. We approve moving forward with the initial remediation investigation at the DBD Washington and SMD Inc. Dairies, as a result the June 9, 2023, Consent Decree settlement.

We note the information collected during the initial remediation investigation will support two specific pilot study proposals. WET is planning on implementing the Oxygenation Pilot Study and Agri management on implementing the Enzyme Pilot Study. Both of these pilot studies plans will need to include a Quality Assurance Project Plan (QAPP) that Ecology will need to review and approve before work begins on the pilot projects. Additional permitting requirements may be needed after Ecology reviews the pilot study plans, which may or may not include obtaining water rights.

Please consult with Ecology's Water Resources program regarding water rights, Christopher Kossik at (509)-379-1826 or ckos461@ecy.wa.gov.

If you have any additional questions, please contact Heather Patt at 360-764-0890 or heather.patt@ecy.wa.gov.

Thank you,

A handwritten signature in black ink, appearing to read "Jeff Killelea".

Jeff Killelea, Manager
Permit and Technical Services Unit
Water Quality Program



Exhibit 12 – Curriculum Vitae of David J. Erickson

David J. Erickson, PG, CPG

President/Hydrogeologist

Water & Environmental Technologies, PC

480 East Park, Suite 200

Butte, MT 59701

(406)782-5220

derickson@waterenvtech.com

Education

- Bachelor of Science, Geological Engineering, Montana College of Mineral Science & Technology 1988
- Continuing Education Credits – 1990, 1991

Professional History

- *Water & Environmental Technologies*; Butte, MT, President/Hydrogeologist, August 2000 – present
- *Atlant, Inc.*, Butte; MT, Principal Hydrogeologist/Project Manager, May 1994 – August 2000
- *Special Resource Management, Inc.*; Butte, MT, Geological Engineer/Hydrogeologist, 1990-1994
- *Woodward-Clyde Consultants*; Houston, Texas, Staff Geological Engineer/Hydrogeologist, 1989-1990
- *Petroleum Testing Service*; Houston, Texas, Geological Technician, 1988-1989

Representative Experience

Project Manager and Hydrogeologist responsible for the characterization and remediation of a dissolved solvent plume from a county landfill. Remediation consists of in-situ air sparging and a funnel-and-gate capture and in-situ treatment system. The sites complex fractured bedrock and extremely complex ground water flow characteristics required innovative investigation technology to understand the water and contaminant interaction between the bedrock and the alluvial aquifers and ground water and surface water.

Project highlights include:

- The use of geophysical method to characterize the bedrock topography and the connection and interaction between aquifers,
- The use of direct push subsurface investigation methods to characterize site conditions and identify contaminant transport pathways,
- Ground water flow and contaminant transport modeling to describe site conditions and test remedial options,
- The installation of source specific remedial methods to control landfill leachate impacts,
- Long term responsibility for all surface water, ground water, remediation, and reporting requirements for the site, and
- Presentation of site characteristics, model results, and site remediation costs in District Court.

Project Hydrogeologist and Lead Expert for the investigation and characterization of geologic, hydrogeologic, and contaminant migration characteristics of solvent and fuel contamination impacting a residential neighborhood. The goal of the investigation work was to determine the source of contamination and identify the responsible party. Geophysical methods (soil conductivity logging) and depth specific profile sampling was used to identify perchloroethylene migration and degradation in multiple production zones within the alluvial aquifer. This subsurface investigation established a connection between historical lagoon leakage and residential supply wells.

Project Manager and Lead Expert conducting a site investigation to assess the impact of historical mining and milling activities on ground water and stream water quality. Dissolved metals concentrations impacting a small town public water supply system prompted a complaint against the Mining Company. Tailings investigations and in stream tracer testing established a direct connection between stream water contamination and spring contamination.

Project Hydrogeologist/Manager for the investigation and remediation of many UST and Hazardous Waste Sites. Contaminants include fuels, solvents, wood treating compounds, metals, pesticides, herbicides, fungicides, and fertilizers.

Project Manager/Hydrogeologist responsible for the design, installation, and monitoring of various types of remedial technologies or remedial methods including (air stripping, air sparging, vapor extraction, bioventing, bio-cell treatment, biostimulation (ORC), NAPL recovery, in-situ & ex-situ bioremediation, natural attenuation, excavation & off-site disposal).

Project Manager responsible for the investigation and remediation of 29 sites in Montana and North Dakota where pesticides, herbicides, fungicides, fuels and fertilizers were spilled.

Project Manager and Hydrogeologist for extensive study and ground water modeling of contaminant effects from ash disposal ponds on an arid Wyoming drainage. The study involved:

- Prediction of contaminant transport,
- Simulation of remedial options,
- Design, installation, optimization and operation of remediation system,
- Permitting of facility expansion,
- Extensive presentations and negotiations with regulatory agencies, and
- Dispute resolution between the facility and potentially effected parties.

Project Engineer responsible for the design and permitting of a double-lined hazardous and non-hazardous repository with leachate collection and ground water relief system.

Project Engineer and Project Manager responsible for the design of ground water monitoring systems and subsurface geological, hydrogeological, and geotechnical investigation.

Project Hydrogeologist studying ground water fluctuations at a RCRA Part B TSD (Hazardous Waste Disposal Facility) in Oregon. Both hydrogeologic and contaminant transport characteristics were very complex.

Project Hydrologist responsible for sediment transport and stream water quality modeling for mine tailing disposal project in Malasia.

Project Hydrogeologist responsible for re-permitting several industrial landfills for large coal-fired electric generating plants in Wyoming. Projects involved investigation of water quality degradation from fly ash disposal activities and characterization of the potential health risks. A statistical evaluation of the water quality was completed to identify potential impacts.

Project Hydrogeologist for evaluation water chemistry changes resulting from the use of wastewater for irrigation at a research farm in Utah.

Project Hydrogeologist for yearly monitoring data analysis at several industrial plants with ponds or landfills in Wyoming and Utah.

Project Hydrogeologist performing final phase of landfill siting study for new RCRA Subtitle D Municipal Solid Waste Landfill

Project Hydrogeologist/Manager for the investigation and remediation of many UST and Hazardous Waste Sites. Contaminants include fuels, solvents, wood treating compounds, metals, pesticides, herbicides, fungicides, and fertilizers.

Project Manager/Hydrogeologist responsible for the design, installation, and monitoring of various types of remedial technologies or remedial methods including (air stripping, air sparging, vapor extraction, bioventing, bio-cell treatment, biostimulation (ORC), NAPL recovery, in-situ & ex-situ bioremediation, natural attenuation, excavation & off-site disposal).

Project Manager responsible for the investigation and remediation of 29 sites in Montana and North Dakota where pesticides, herbicides, fungicides, fuels and fertilizers were spilled.

Expert Witness/Litigation Support Experience

- *Park County v. Burlington Northern Santa Fe Railway Company, Montana Sixth Judicial District Court, Park County, Cause No. DV 97-75, July, 1999.*

- *C&P Packing v. Burlington Northern Santa Fe Railway Company*, Park County, January 2001.
- *Hepp v. Conoco Inc. et. al.*, ADV-2003-14
- *Town of Sunburst v. Texaco et. al.*, CDV-01-179 (a)
- *Town of Superior v. Asarco Incorporated*, US District Court, Missoula Division
- *Aguilar v. Burlington Northern*, United States District Court, Great Falls Division
- *Schammel et. al. v. CR Kendall Corporation*, United States District Court, Great Falls Division.
- *Van Haur v. CR Kendal Corp* United States District Court, Great Falls Division
- *Weiss et. al. v. HCI Dyce Chemical Company*, CV-00-123-BLG-JDS
- *Sieben Livestock Company v. Harp Line Contractors*.
- *Cool Breeze Inc. v. Flying J Inc., Maxim Technologies Inc.*
- Cause No. ADV-04-984
- *Friends of the Little Bitterroot v. Commissioners of Flathead County* Cause No.: DV-06-560
- *Mapleton City Corporation v. The Ensign-Bickford Company*, Case No. 020404933
- *Bergren v. BNSF*: CV-03-120-BLG-RFC
- *Devries v. BNSF*: CV-03-121-BLG-RFC
- *Outlook Enterprises v. BNSF*: CV-03-139-BLG-RFC
- *Hallett Minerals v. BNSF* Cause No. CV-03-161-BLG-RFC
- *Ruggles Excavation v. BNSF* Cause No. CV-03-160-BLG-RFC
- *Burley, Nelson, Meridith v. BNSF*
- *Anderson et. al. v. BNSF*, Cause No. ADV-2008-101
- *Kerfoot v. Texaco et. al.* Cause No BDV-08-1276
- *City of Livingston et. al. V. BNSF*, Cause No. DV07-141
- *Graham et, al.v. BNSF*, Cause No. CV-12-145-M-DVM
- *CARE, Inc. and Center for Food Safety, Inc. v. Cow Palace, LLC*, Docket No. 2:13-cv-3016-TOR
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- *Lockman v. Pioneer Natural Resources*, Cause No. CV-20-67-BMM-JTJ

Professional Development

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| • Hazardous Waste and Geotech Sampling Seminar | • Geostatistical Analysis in Hazardous Waste Site Evaluation |
| • Monitoring Well Installation Seminar | • Ground Water Summit 2008 |
| • Analytical Laboratory Seminar (ENSECO) | • Montana Water Law Conference 2007 |
| • Design & Construction of RCRA Final Covers | • Landfill Gas Extraction & Ground Water Corrective Measures (presenter) |
| • Enhanced Bioremediation (EPA) | • National Ground Water Association Annual Conference – heterogeneity |
| • Ground Water Pollution & Hydrogeology, Princeton | • Environmental Geochemistry of Metals |

- Environmental Isotopes in Ground Water Resource and Environmental Contamination
- Environmental Forensics: Methods & Applications
- 2004 NGWA Water & Environmental Law Conference
- Agrochemical Transport and Fate 2022

Certifications

Professional Geologist, Wyoming PG-3101

Professional Geologist, Utah PG-2250

Certified Professional Geologist, American Institute of Professional Geologists, CPG#9402

OSHA 29 CFR 1910.120 Health & Safety

OSHA 29 CFR Certified Waste Site Supervisor

Certified Monitoring Well Constructor

Affiliations

Association of Ground Water Scientists & Engineers

National Ground Water Association

American Institute of Professional Geologist

American Chemical Society

International Society of Environmental Forensics

Awards

Montana Tech Distinguished Alumni Recognition Award, 2003

Exhibit 13 – Curriculum Vitae of Dr. Michael Russelle

Michael P. Russelle

Adjunct Professor, University of Minnesota
Saint Paul, MN 55108

Title Adjunct Professor, Department of Soil, Water, and Climate, University of Minnesota
Member of the Graduate Faculty in Soil, Water, and Climate
Formerly: Research Soil Scientist, USDA-Agricultural Research Service (32 years)

Education

| | | | |
|--------------------------------|--------------|-------|------|
| Oregon State University | Agronomy | B.S. | 1976 |
| Oregon State University | Crop Science | M.S. | 1978 |
| University of Nebraska-Lincoln | Agronomy | Ph.D. | 1982 |

Honors and Awards

- Fellow, American Society of Agronomy, 1997
- Fellow, Soil Science Society of America, 2004
- USDA-ARS Midwest Area Senior Scientist of the Year, 2004
- Distinguished Service Award, Sigma Xi, University of Minnesota Chapter, 2009
- Outstanding Service Award, Midwest Forage Association, 2014-2015

Special national and international invitations: >100 to present seminars, plenary talks, to conduct scientific review of University- and State-level research programs, and to examine PhD students. International invitations from Argentina, Australia, Austria, Brazil, Canada, Ireland, Switzerland, Sweden, and the UK.

Technology Transfer: >160 technical articles for scientists, Extension, and the farm press, and invited talks to farmers, farm advisors, and nutrient management professionals. Have consulted professionally on a wide variety of topics, including:

- several instances of excess nitrogen contamination of soil and water and approaches to mitigating the problem,
- reducing nitrate leaching at a food processing wastewater site,
- the justification, importance, and significance of the original Federal District Court decision to include livestock manure as a potential pollutant under the RCRA rules,
- manure management in perennial-annual crop rotations,
- approaches to reducing pathogen transmission through manure on dairy farms,
- long-term soil quality impacts of a large ground-mount solar installation, and
- discovery and evaluation of novel nitrogen-fixing systems in non-legumes.

Peer-reviewed publications (journal articles, book chapters, and Extension publications)

Russelle, M.P., and F.E. Bolton. Soil temperature effects on winter wheat and winter barley emergence in the field. Agron. J. 72: 823-827. 1980.

Russelle, M.P., E.J. Deibert, R.D. Hauck, M. Stevanovik, and R.A. Olson. Effects of water and nitrogen management on yield and ¹⁵N-depleted fertilizer use efficiency of irrigated corn. Soil Sci. Soc. Am. J. 45: 553-558. 1981.

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- Yost, M.A., J.A. Coulter, and M.P. Russelle. Managing the rotation from alfalfa to corn. Univ. of Minnesota Extension. 12 pp. 2015. (peer-reviewed Extension publication)
- Walker, Z.T., J.A. Coulter, M.P. Russelle, R.T. Venterea, A.P. Mallarino, J.G. Lauer, and M.A. Yost. Do soil tests help forecast nitrogen response in first-year corn following alfalfa on fine-textured soils? Soil Sci. Soc. Am. J. 81:1640-1651. 2017.
- Martin, N.P., M.P. Russelle, J.M. Powell, C.J. Sniffen, S.I. Smith, J.M. Tricarico, and R.J. Grant. *Invited review*: Sustainable forage and grain crop production for the US dairy industry. J. Dairy Sci. 100:9479-9494. 2017.
- Varga, T., S. Ao, M.P. Russelle, J.A. Coulter, and A.E. Sawyer. Scaled-up effervescence-revised fine root extraction device (SUPER FRED) for crop phenotyping. Proc. ASABE. 2018.
- Varga, T., G.W. Feyereisen, M.P. Russelle, S. Ao, and J.A. Coulter. Versatile, precise drip irrigation system for agronomic small-plot research. Proc. ASABE. 2018.
- Ao, S., M.P. Russelle, T. Varga, G.W. Feyereisen, and J.A. Coulter. Drought tolerance in maize is influenced by timing of drought stress initiation. Crop Sci. 60:1591-1606. 2020.
- Ao, S., M.P. Russelle, G.W. Feyereisen, T. Varga, and J.A. Coulter. Maize hybrid response to sustained moderate drought stress reveals clues for improved management. Agronomy 10. 20 pp. 2020.
- Wedin, D.A., and M.P. Russelle. Nutrient cycling in forage production systems. p.215-225. In K.J. Moore et al. Forages. Vol 2: The science of grassland agriculture. 7th Ed. John Wiley & Sons, West Sussex, England. 2020.

Exhibit 14 – Curriculum Vitae of Dr. Keeve Nachman

Revised January 17, 2023

CURRICULUM VITAE

Keeve Edward Nachman

PERSONAL DATA

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Johns Hopkins Bloomberg School of Public Health
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Baltimore, MD 21205-2179
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(t) (410) 502-7576 / (f) (410) 502-7579*

EDUCATION AND TRAINING

***Postdoctoral Fellow**, United States Environmental Protection Agency, Office of Policy, Economics and Innovation, National Center for Environmental Economics, Washington, DC, October 2006 – September 2008*

***Doctor of Philosophy (PhD) in Health Policy and Management with specialization in Environmental and Occupational Health Policy**, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, August 2006*

Thesis Title: A Comparative Multi-pathway Probabilistic Risk Assessment of Human Exposures to Arsenic Resulting from the Use of Pelletized Poultry House Waste and Biosolids Fertilizers

Thesis Advisor: Dr. Thomas Burke, Professor, Department of Health Policy and Management

***Master of Health Sciences (MHS) in Environmental Health Sciences with specialization in Radiation Health Sciences and Medical Physics**, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, May 2001*

***Bachelor of Arts (BA) in Writing Seminars**, Johns Hopkins University, Baltimore, MD, May 1999*

PROFESSIONAL EXPERIENCE

***Associate Professor**, Baltimore, MD, April 2020 - Present*

Departments of Environmental Health and Engineering (primary) and Health Policy and Management (joint), Johns Hopkins Bloomberg School of Public Health

***Assistant Professor**, Baltimore, MD, October 2014 – April 2020*

Departments of Environmental Health and Engineering (primary) and Health Policy and Management (joint), Johns Hopkins Bloomberg School of Public Health

***Assistant Scientist**, Baltimore, MD, July 2010 – October 2014*

Departments of Environmental Health Sciences and Health Policy and Management, Johns Hopkins Bloomberg School of Public Health

***Food Production and Public Health Program Director and Science Director for Food Production, Health and Environment**, Baltimore, MD, April 2009 – Present
Johns Hopkins Center for a Livable Future*

Toxicologist/Risk Assessor, Baltimore, MD, September 2008 – April 2009

United States Army Corps of Engineers, Engineering Division, Hazardous, Toxic and Radioactive Waste Branch, Remedial Investigation and Design Section

Environmental Scientist/ Postdoctoral Fellow, Washington, DC, October 2006 – September 2008

United States Environmental Protection Agency, Office of Policy, Economics and Innovation, National Center for Environmental Economics

Environmental Health Risk Assessor/Project Manager, Baltimore, MD, October 2005 – September 2006

Johns Hopkins Bloomberg School of Public Health, Department of Environmental Health, Division of Environmental Health Engineering

PROFESSIONAL ACTIVITIES

Society Membership and Leadership

American Public Health Association (2009 – present)

- Moderator, “Food safety, social disparities: Antibiotic resistance in the food system, A to Z” at American Public Health Association Annual Meeting, Denver, CO, November 2010.
- Water and Health Committee (2016 – present)

Society for Risk Analysis (2011 – present)

- Moderator, “Regulatory Risk Analysis Symposium” at Society for Risk Analysis Annual Meeting, Denver, CO, December 2014.

Science and Regulatory Advisory Panel, Water and Environment Research Foundation (2009-2010)

International Society for Environmental Epidemiology (2008 – 2009, 2018 - present)

- Session Chair, “Risk Analysis and Burden of Disease” at International Society of Environmental Epidemiology and International Society of Exposure Analysis Joint Meeting. Pasadena, CA, October 2008.

Participation on Advisory Panels

Maryland Attorney General’s Environmental Advisory Council (2010 – present)

JHSPH Department of Environmental Health Sciences DrPH Committee (2011 – present)

JHSPH Interdepartmental Implementation Science Committee (2012 – present)

Maryland Department of Health and Mental Hygiene Food Safety Roundtable (2012 – present)

Consumer Reports Scientific Advisory Council (2013 – present)

World Health Organization Foodborne Disease Burden Epidemiology Reference Group – Heavy Metals Panel (2013 – 2014)

Maryland Pesticide Education Board, Board President (2013 – 2017)

Advisory Committee, Third Annual Environmental Justice and Environmental Health Disparities in Maryland and Washington, DC Conference (2014)

Community Greening Resource Network Advisory Board (2014 – present)

Dartmouth Toxic Metals Superfund Research Program External Advisory Committee (2014 – present)

Collaborative on Food with Arsenic and associated Risk and Regulation Steering Committee (2015-2018)

Expert Panelist, EPA Workshop on Temporal Exposure Issues for Environmental Pollutants: Health Effects and Methodologies for Estimating Risk (2016)

Selected Stakeholder (Academic), United States Government Accountability Office, Report to the Ranking Member, Subcommittee on Labor, Health and Human Services, Education, and Related Agencies, Committee on Appropriations, House of Representatives – Food Safety: Federal Efforts to Manage the Risk of Arsenic in Rice (2018)

Member, Review of DOD's Revised Approach to Deriving an Occupational Exposure Level for Trichloroethylene (TCE) ad hoc committee, Board on Environmental Studies and Toxicology, National Academies of Sciences, Engineering, and Medicine (2022)

Obesity and the Food System Steering Committee Member, Bloomberg American Health Initiative (2022 – present)

Bloomberg American Health Initiative, Evidence Workgroup (2022 – present)

Program or Project Development

Director, Food Production and Public Health Program, Johns Hopkins Center for a Livable Future (2010 – present)

Senior Director – *Teaching the Food System* Online Curriculum (<http://www.jhsph.edu/teachingfood>)

Consultations

Wake Forest Innocence and Justice Clinic (2018 – present)

Consumers Union/Consumer Reports, various projects (2011 – present)

EPA STAR Graduate Fellowship Review Panel: Risk Assessment (2011)

Legislative Briefing and Technical Support

Advisor, MD Senator Clarence Lam (2019)

Advisor, MD Delegate Robbyn Lewis (2017 - 2018)

Advisor, MD Senator Richard Madaleno (2017) – drafted Community Health Air Act

Advisor, MD Sen. Karen Montgomery (2013 – 2014)

Advisor, US Rep. Louise Slaughter (D-NY) (2010 – 2018)

Advisor, US Rep. Steve Israel (D-NY) (2009 - 2017)

Advisor, MD Del. Tom Hucker (2009 – 2013)

Advisor, MD Sen. Paul Pinsky (2009 – 2013)

Maryland General Assembly, Committee on Health and Governmental Affairs, Public Health Subcommittee, briefing on the health risks and benefits of consuming raw versus pasteurized milk (invited – February 4, 2015)

Testimony

Maryland Senate Bill 359 (2010) – Pesticide Reporting (March 4)

Maryland House Bill 953 (2010) – Agriculture – Commercial Feed – Arsenic Prohibition (March 5)

Maryland Senate Bill 859 (2010) - Agriculture – Commercial Feed – Arsenic Prohibition (March 16)

Maryland Senate Bill 417 (2011) - Agriculture – Commercial Feed – Arsenic Prohibition (March 1)

Maryland House Bill 754 (2011) - Agriculture – Commercial Feed – Arsenic Prohibition (March 2)

Maryland House Bill 167 (2012) – Agriculture – Commercial Feed – Arsenic Prohibition (March 8)

Maryland Senate Bill 207 (2012) – Agriculture – Commercial Feed – Arsenic Prohibition (February 14)

Maryland Senate Bill 520 (2013) – Agriculture – Commercial Feed and Drinking Water – Antimicrobial Drug Prohibition (February 26)

Maryland Senate Bill 521 (2013) – Agriculture – Meat and Poultry – Antibiotic Use – Labeling (February 26)

Maryland House Bill 775 (2013) - Maryland Pesticide Reporting and Information Act (February 27)

Maryland House Bill 79 (2016) - Health – Milk Products – Raw Milk – Consumer–Owned Livestock (written only)

Maryland House Bill 211 (2016) – Environment and Transportation - Neonicotinoid Pesticides – Labeling, Signage, and Restrictions on Sales and Use (written only)

Maryland Senate Bill 133 (2018) – Education, Environment and Health – Community Healthy Air Act (January 27)

Maryland House Bill 26 (2018) – Environment and Transportation – Community Healthy Air Act (February 7)

Maryland Senate Bill 542 (2019) – Education, Environment and Health – Community Healthy Air Act (February 27)

EDITORIAL ACTIVITIES

Peer Review Activities

Professional Journals

- African Journal of Environmental Science and Technology
- Air Quality, Atmosphere and Health
- American Journal of Epidemiology
- American Journal of Public Health
- Applied Biochemistry and Biotechnology
- BMC Veterinary Research
- British Medical Journal
- Cell Biology and Toxicology
- Chemical Research in Toxicology
- Current Environmental Health Reports
- Ecotoxicology and Environmental Safety
- Environmental Health
- Environmental Health Perspectives (2020 Top Peer Reviewer Awardee)
- Environment International
- Environmental Pollution
- Environmental Research
- Environmental Research Letters
- Environmental Science and Technology
- Environmental Modelling and Software
- Exposure and Health
- Foodborne Pathogens and Disease
- Food Chemistry
- Frontiers in Ecology and the Environment
- Health Affairs
- Human and Ecological Risk Assessment
- International Journal of Environmental Research and Public Health
- International Journal of Hygiene and Environmental Health
- Journal of Agricultural and Food Chemistry
- Journal of Environmental Quality
- Journal of Exposure Science and Environmental Epidemiology
- Journal of Hazardous Materials
- Journal of the Royal Society Interface

- Journal of the Science of Food and Agriculture
- Journal of Trace Elements in Medicine and Biology
- Landscape and Urban Planning
- Local Environment
- Microbial Drug Resistance
- Nature Biotechnology
- Nature Sustainability
- New England Journal of Medicine
- PLOS Biology
- PLOS One
- Proceedings of the National Academy of Sciences
- Science
- Science of the Total Environment
- Thorax
- Zoonoses and Public Health

Books

- American Chemical Society Books - Emerging Contaminants: Pharmaceuticals, Personal Care Products and Organohalogenes
- Elsevier book proposal reviewer (Pharmacology and Toxicology)

Federal Government

- United States Environmental Protection Agency/National Center for Environmental Economics Working Paper Series
- Agency for Toxic Substances and Disease Registry, Ad Hoc Reviewer (2015)

Other Technical Reports

- National Resources Defense Council Technical Report on Antibiotic Approvals (2014)
- National Resources Defense Council Technical Report on Industry Antibiotic Policy (2015)
- National Academy of Engineering, The Bridge: Linking Engineering and Society (2022)

Editorial Board Membership

Associate Editor, *Exposure and Health* (2022 – present)

Editorial Review Board, *Environmental Health Perspectives* (2017 – present)

Section Editor (Food), *Current Environmental Health Reports* (2014 - present)

Ad Hoc Review of Proposals

Johns Hopkins Center for a Livable Future Predoctoral Fellowship Review Panel (2009 - present)

Johns Hopkins Center for a Livable Future Innovation Grant Review Panel (2010)

Johns Hopkins Center for a Livable Future Carl Taylor Grant Review Panel (2010 - present)

Johns Hopkins Center for a Livable Future Aquaculture Research Grant Review Panel (2013 – present)

EPA STAR Graduate Fellowship Review Panel: Risk Assessment (2011)

Foundation for Food and Agriculture Research (2017 - 2018)
California Breast Cancer Research Program (2019, 2020 [Review panel Chair])
NIEHS Superfund Review Panel (2021)

HONORS AND AWARDS

Honors

Delta Omega Public Health Honor Society, May 2007
Center for a Livable Future Doctoral Fellowship, July 2005
Center for a Livable Future Doctoral Fellowship, July 2004
Risk Sciences and Public Policy Institute Certificate, May 2001

Awards

JHSPH Teaching Excellence/Outstanding Teaching (years awarded in parentheses)

- For Case Studies in Food Production and Public Health (2015, 2016, 2017, 2020, 2021, 2022)
- For Essentials of Environmental Health (online) (2021)
- For Introduction to the Food Systems and Public Health (2015, 2018, 2020, 2021)
- For Introduction to the Risk Sciences and Public Policy (2014, 2020, 2021)
- For Risk Assessment and Food Production Practices (2018)
- For Topics in Risk Assessment (2014, 2016, 2017, 2019, 2020, 2021, 2022)
- For Topics in Risk Assessment (online) (2018, 2019, 2020, 2021)

Excellence in Baltimore Public Health Practice, Johns Hopkins Office of Public Health Practice and Training, April 2019

Lipitz Public Health Policy Award, May 2018

Society for Risk Analysis, Dose-Response Working Group (travel award), October 2014

EPA “S” Award (Spatial Databases Linking Project), July 2008

EPA “S” Award (Probabilistic Risk Activities), July 2008

EPA “S” Award (Probabilistic Risk and Risk Assessment Portal Activities), July 2007

Health Policy and Management Departmental Scholarship, September 2002

PUBLICATIONS

Journal Articles (signifies peer review)

**indicates corresponding author; †indicates student mentee first author*

1. **Nachman KE**, Graham JP, Price LB, Silbergeld EK. “Arsenic: a roadblock to potential animal waste management solutions.” *Environ Health Perspect.* 2005 Sep;113(9):1123-4. [commentary] (prompted federal and state legislation to prohibit the use of arsenic-based animal drugs)
2. Navas-Acien A., Sharrett AR, Silbergeld EK, Schwartz BS, **Nachman KE**, Burke TA, Guallar E. “Arsenic Exposure and Cardiovascular Disease: A Systematic Review of the Epidemiologic Evidence.” *Am J Epidemiol.* 2005 Dec 1;162(11):1-13.
3. **Nachman KE**, Mihalic JN, Burke TA, Geyh AS. “Determination and Comparison of Arsenic Content in Pelletized Poultry House Waste and Biosolids Fertilizer.” *Chemosphere.* 2008 Mar;71(3):500-6.

4. Resnick B, Zablotzky J, **Nachman K**, Burke T. “Examining the Front Lines of Local Environmental Public Health Practice: A Maryland Case Study.” J Public Health Manag Pract 2008; 14, 42-50.
5. Silbergeld EK, **Nachman K**. “The Environmental and Public Health Risks Associated with Arsenical Use in Animal Feeds.” Ann N Y Acad Sci. 2008 Oct;1140:346-57.
6. Graham JP, **Nachman KE**. “Managing Waste from Confined Animal Feeding Operations in the United States: The Need for Sanitary Reform.” J Water Health. 2010 Dec;8(4):646-70.
7. Love DC, Davis MF, Bassett A, Gunther A, **Nachman KE**. “Dose imprecision and resistance: medicated free-choice feeds in industrial food animal production” Environ Health Perspect. 2011 Mar;119(3):279-83. [commentary]
8. Sapkota A, Chelikowski AP, **Nachman KE**, Cohen AJ, Ritz B. “Exposure to Particulate Matter and Adverse Birth Outcomes: A Comprehensive Review and Meta Analysis.” Air Qual Atmos Health, 2010, DOI: 10.1007/s11869-010-0106-3.
9. **Nachman KE**, Fox MA, Sheehan MC, Burke TA, Rodricks JV, Woodruff TJ. “Leveraging epidemiology to improve risk assessment.” TOEPIJ 2011;4.
10. Love DC, Rodman SO, Neff RA, **Nachman KE**. “Veterinary drug residues in seafood inspected by the European Union, United States, Canada, and Japan from 2000 to 2009.” Environ Sci Technol. 2011 Sep 1;45(17):7232-40.
11. Neff R, Hartle J., Dolan K., Rosenthal A., Laestadius L., **Nachman KE**. “A Comparative Study of Allowable Pesticide Residue Levels on Domestic and Imported Produce in the United States.” Global Health. 2012 Jan 31;8(1):2
12. **Nachman KE**, Raber G, Francesconi KA, Navas-Acien A, Love DC. “Arsenic species in poultry feather meal.” Sci Total Environ. 2012 Feb 15;417-418:183-8.
13. Love DC, Davis MF, Halden R, **Nachman KE**., “Feather meal: a previously unrecognized route for reentry into the food supply of multiple pharmaceuticals and personal care products (PPCPs)”. Environ. Sci. Technol., 2012, 46 (7), pp 3795–3802. (*Listed as top 5 “Most Read” by journal, featured in New York Times column*)
14. **Nachman KE**, Parker JD. “Exposures to fine particulate air pollution and respiratory outcomes in adults using two national datasets: a cross-sectional study” Environ Health. 2012 Apr 10;11:25. (*Deemed “Highly Accessed” by journal*)
15. Parker JD, Kravets N, **Nachman K**, Sapkota A. “Linkage of the 1999–2008 National Health and Nutrition Examination Surveys to Traffic Indicators From the National Highway Planning Network”. Natl Health Stat Report. 2012 Apr 2;(45):1-16.
16. Fain KM, **Nachman KE**, Rutkow L. (2013). An analysis of FDA's drug safety authorities: Challenges and opportunities under new regulatory framework. New York University Journal of Legislation and Public Policy 17(1), 1-36.
17. Love DC, Davis MF, Halden R, **Nachman KE**., Response to Comment on “Feather Meal: A Previously Unrecognized Route for Reentry into the Food Supply of Multiple Pharmaceuticals and Personal Care Products (PPCPs)”. Environ Sci Technol, 2012, 46 (24), pp 13557–13558. [letter]

18. Love DC, Davis MF, Halden R, **Nachman KE.**, Response to Comment on “Feather Meal: A Previously Unrecognized Route for Reentry into the Food Supply of Multiple Pharmaceuticals and Personal Care Products (PPCPs)”. *Environ Sci Technol*, 2012, 46 (23), pp 13026–13027. [*letter*]
19. Fry JP, Laestadius LI, Grechis C, **Nachman KE**, Neff RA. “Investigating the Role of State and Local Health Departments in Addressing Public Health Concerns Related to Industrial Food Animal Production Sites”. *PLoS One*. 2013;8(1):e54720.
20. Navas-Acien A, **Nachman KE.** “Public Health Responses to Arsenic in Rice and other Foods.” *JAMA Int Med*, 2013 Apr 29:1-2. [*invited commentary*]
21. **Nachman KE**, Baron PA, Raber G, Francesconi KA, Navas-Acien A, Love DC. Roxarsone, Inorganic Arsenic and Other Arsenic Species in Chicken: A U.S.-Based Market Basket Sample. *Environ Health Perspect*, 2013 Jul;121(7):818-24. (*Featured in New York Times article and as a featured science selection in Environmental Health Perspectives*)
22. Casey JA, Curriero FC, Cosgrove SE, **Nachman KE**, Schwartz BS. High-density livestock farms, crop field application of manure, and risk of community associated methicillin-resistant *Staphylococcus aureus* infection, Pennsylvania, USA. *JAMA Int Med*, 2013 Nov 25;173(21):1980-90.
23. **Nachman KE**, Baron PA, Raber G, Francesconi KA, Love DC. Arsenic Levels in Chicken: Nachman et al. Respond. *Environ Health Perspect*, 2013 Sep; 121:A267–A268. [*letter*]
24. Maron DF[†], Smith TJ, **Nachman KE***. Restrictions on antimicrobial use in food animal production: an international regulatory and economic survey. *Globalization and Health* 2013, 9:48 [**corresponding author, 4th most cited paper in the history of the journal*]
25. Smith TJS, Rubenstein LS, **Nachman KE***. Availability of Information about Airborne Hazardous Releases from Animal Feeding Operations. *PLoS ONE* 2013;8(12): e85342. [**corresponding author*]
26. **Nachman KE**, Smith TJS, Martin RP. “Antibiotics: Call for Real Change” *Science* 2014 343(6167):136. [*letter*]
27. Navas-Acien N, **Nachman KE.** Arsenic in Rice and Other Foods – Reply. *JAMA Intern Med*. 2014;174(2):298-299. [*letter*]
28. Kim B, Poulsen MN, Margulies JD, Dix K, Palmer AM, **Nachman KE***. Urban Community Gardeners’ Knowledge and Perceptions of Soil Contaminant Risks. *PLoS ONE* 2014. 9(2): e87913 [**corresponding author*](*Featured in a PLoS One “EveryONE” blog*)
29. Fry JP, Laestadius LI, Grechis C, **Nachman KE**, Neff RA. Investigating the Role of State Permitting and Agriculture Agencies in Addressing Public Health Concerns Related to Industrial Food Animal Production. *PLoS ONE* 2014. 9(2): e89870.

30. Casey JA, Shopsis B, Cosgrove SE, **Nachman KE**, Curriero FC, Rose HR, Schwartz BS. Molecular characterization of MRSA infection and association with high-density livestock production in Pennsylvania, USA. *Environmental Health Perspectives* 2014. 122(5):464-70
31. Baron PA[†], Love DC, **Nachman KE***. Pharmaceuticals and Personal Care Products in Chicken Meat and other Food Animal Products: A Market-Basket Pilot Study. *Science of the Total Environment* 2014. 490 (2014) 296–300. [**corresponding author*]
32. Nadimpalli M, Rinsky JL, Wing S, Hall D, Stewart J, Larsen J, **Nachman KE**, Love DC, Pierce E, Pisanic N, Strelitz J, Harduar-Morano L, Heaney CD. Persistence of livestock-associated antibiotic-resistant *Staphylococcus aureus* among industrial hog operation workers in North Carolina over 14 days. *Occup Environ Med.* 2015 Feb;72(2):90-9.
33. Love DC, Tharavichitkul P, Arjkumpa O, Imanishi M, Hinjoy S, Nelson K, **Nachman KE**. Antimicrobial Use and Multidrug-Resistant *Salmonella* spp., *Escherichia coli*, and *Enterococcus faecalis* in Swine from Northern Thailand. *Thai Journal of Veterinary Medicine* 2015 Mar; 45(1):43-53.
34. **Nachman KE**, Smith TJS. Hormone Use in Food Animal Production: Assessing Potential Dietary Exposures, and Breast Cancer Risk. *Curr Environ Health Rep.* 2015 Mar;2(1):1-14.
35. Smith TJS, Wolfson JA, Jiao D, Crupain MJ, Rangan U, Sapkota A, Bleich SN, **Nachman KE***. Caramel Color in Soft Drinks and Exposure to 4-Methylimidazole: A Quantitative Risk Assessment. *PLoS ONE* 2015. 10(2): e0118138. [**corresponding author*]
36. So AD, Shah TA, Roach S, Chee YL, **Nachman KE**. International Agreement to Address the Contribution of Animal Agriculture to Antibiotic Resistance: A One Health Approach. *Journal of Law, Medicine and Ethics* 2015 Summer; 43 Suppl 3:38-45.
37. Casey JA, Kim BF, Larsen J, Price LB, **Nachman KE**. Industrial food animal production and community health. *Current Environmental Health Reports* 2015 Sep;2(3):259-71.
38. Hilpert M, Mora BA, Ni J, Rule A, **Nachman KE**. Hydrocarbon Release During Fuel Storage and Transfer at Gas Stations: Environmental and Health Effects. *Current Environmental Health Reports* 2015 Dec;2(4):412-22.
39. Boyle MD, Payne-Sturges DC, Sangaramoorthy T, **Nachman KE**, Babik K, Wilson S, Milton D, Sapkota A. Hazard Ranking Methodology for Assessing Health Impacts of Unconventional Natural Gas Development and Production: The Maryland Case Study. *PLOS ONE* 2016;11(1):e0145368.
40. Fry JP, Love DC, MacDonald GK, West PC, Engstrom PM, **Nachman KE**, Lawrence RS. Environmental Health Impacts of Feeding Crops to Farmed Fish. *Environment International* 2016;91:201-214.
41. Fox MA, **Nachman KE**, Anderson B, Lam J, Resnick B. Meeting the public health challenge of protecting private wells: Proceedings and recommendations from an expert panel workshop. *Science of the Total Environment.* 2016;554:113-118.

42. Krishnakumar P, Qurban MA, Stiboller M, **Nachman KE**, Joydas TV, Manikandan M, Shemsi AM, Francesconi KA. Arsenic and arsenic species in shellfish and finfish from the western Arabian Gulf and consumer health risk assessment. *Science of the Total Environment* 2016 Oct 1;566-567:1235-44.
43. Nigra AE, **Nachman KE**, Love DC, Grau-Perez M, Navas-Acien A. Poultry Consumption and Arsenic Exposure in the U.S. Population. *Environ Health Perspect* 2017; <http://dx.doi.org/10.1289/EHP351>
44. **Nachman KE**, Love DC, Baron PA, Nigra AE, Murko M, Raber G, Francesconi KA, Navas-Acien A. Nitarstone, Inorganic Arsenic, and Other Arsenic Species in Turkey Meat: Exposure and Risk Assessment Based on a 2014 U.S. Market Basket Sample. *Environ Health Perspect* 2017; <http://dx.doi.org/10.1289/EHP225>
45. Sheingate A, Scatterday A, Martin RP, **Nachman KE**. Post-Exceptionalism and Corporate Interests in U.S. Agricultural Policy. *Journal of European Public Policy*. 2017. 24, 1641-1657. doi:10.1080/13501763.2017.1334082
46. **Nachman KE**, Ginsberg GL, Miller MD, Murray CJ, Nigra AE, Prendergrast CB. Mitigating Dietary Arsenic Exposure: Current Status and Recommendations for an Improved Path Forward. *Science of the Total Environment* 2017 March 1;581-582: 221-236.
47. **Nachman KE**, Lam J, Schinasi LH, Smith TC, Feingold BJ, Casey JA, O'Connor et al. systematic review regarding animal feeding operations and public health: critical flaws may compromise conclusions. *Systematic Reviews*. 2017;6(1):179. doi: 10.1186/s13643-017-0575-7.
48. Moon KA, Oberoi S, Barchowsky A, Chen Y, Guallar E, **Nachman KE**, Rahman M, Sohel N, D'Ippoliti D, Wade TJ, James KA, Farzan SF, Karagas MR, Ahsan H, Navas-Acien A. A dose-response meta-analysis of chronic arsenic exposure and incident cardiovascular disease. *International Journal of Epidemiology*. 2017;46(6):1924-39. doi: 10.1093/ije/dyx202.
49. Nigra AE, Sanchez TR, **Nachman KE**, Harvey D, Chillrud SN, Graziano JH, Navas-Acien A. The effect of the Environmental Protection Agency maximum contaminant level on arsenic exposure in the USA from 2003 to 2014: an analysis of the National Health and Nutrition Examination Survey (NHANES). *Lancet Public Health* 2(11): e513-e521.
50. Synk CM[†], Kim BF, Davis CA, Harding J, Rogers V, Hurley PT, Emery MR, **Nachman KE***. Gathering Baltimore's Bounty: Characterizing behaviors, motivations and barriers of foragers in an urban ecosystem. *Urban Forestry and Urban Greening* 28(2017): 97-102. [**corresponding author*]
51. Poulsen MN, Pollak J, Sills DL, Casey JA, Rasmussen SG, **Nachman KE**, Cosgrove SE, Stewart D, Schwartz BS. Residential proximity to high-density poultry operations associated with campylobacteriosis and infectious diarrhea. *International Journal of Hygiene and Environmental Health*. 2018;221(2):323-33. doi: <https://doi.org/10.1016/j.ijheh.2017.12.005>.
52. Poulsen MN, Pollak J, Sills DL, Casey JA, **Nachman KE**, Cosgrove SE, Stewart D, Schwartz BS. High-density poultry operations and community-acquired pneumonia in Pennsylvania. *Environmental Epidemiology*. 2018;2(2):e013. doi: 10.1097/ee9.0000000000000013.

53. Makary MA, Kaczmarek K, **Nachman K**. A call for doctors to recommend antibiotic-free foods: agricultural antibiotics and the public health crisis of antimicrobial resistance. *The Journal of Antibiotics*. 2018;71(8):685-7. doi: 10.1038/s41429-018-0062-y
54. **Nachman KE**, Punshon T, Rardin L, Signes-Pastor AJ, Murray CJ, Jackson BP, Guerinot ML, Burke TA, Chen CY, Ahsan H, Argos M, Cottingham KL, Cubadda F, Ginsberg GL, Goodale BC, Kurzius-Spencer M, Meharg AA, Miller MD, Nigra AE, Pendergrast CB, Raab A, Reimer K, Scheckel KG, Schwerdtle T, Taylor VF, Tokar EJ, Warczak TM, Karagas MR. Opportunities and Challenges for Dietary Arsenic Intervention. *Environmental Health Perspectives*. 2018;126(8):084503. doi:10.1289/EHP3997. *This manuscript is a consensus statement from the Collaborative on Food with Arsenic and associated Risk and Regulation (C-FARR), involving an international interdisciplinary and multi-institutional authorship team.*
55. Jones MR, Tellez-Plaza M, Vaidya D, Grau-Perez M, Post WS, Kaufman JD, Guallar E, Francesconi KA, Goessler W, **Nachman KE**, Sanchez TR, Navas-Acien A. Ethnic, geographic and dietary differences in arsenic exposure in the multi-ethnic study of atherosclerosis (MESA). *Journal of Exposure Science & Environmental Epidemiology*. 2019. doi: 10.1038/s41370-018-0042-0
56. Kim H[†], Rebholz C, Caulfield L, Ramsing R, & **Nachman, KE*** (2019). Trends in types of protein in US adults: Results from the National Health and Nutrition Examination Survey 1999–2010. *Public Health Nutrition*, 1-11. doi:10.1017/S1368980018003348 [**corresponding author*]
57. Lam Y[†], Fry JP, **Nachman KE***. Applying an environmental public health lens to the industrialization of food animal production in ten low- and middle-income countries. *Globalization and Health*. 2019, 15 (1), 40 [**corresponding author*]
58. Kim BF, Santo R, Scatterday AP, Fry JP, Synk CM, Cebon SR, Mekonnen MM, Hoekstra AY, de Pee S, Bloem MW, Neff RA, **Nachman KE***. (2020) Country-specific dietary shifts to mitigate climate and water crises. *Global Environmental Change* p. 101926 [**corresponding author*]
59. Kim H[†], Caulfield L, Rebholz C, Ramsing R, & **Nachman KE*** Trends in types of protein in US adolescents and children: Results from the National Health and Nutrition Examination Survey 1999-2010. *PLOS ONE*. 2020, 15 (3), e0230686 [**corresponding author*]
60. Santo RE, Kim BF, **Nachman KE**. Questions and Concerns Re: Blue Water Footprints Reported in “Water Footprint of Meat Analogs: Selected Indicators According to Life Cycle Assessment” *Water* 2020, 12(5), 1270.
61. Spaur M[†], Davis BJK, Kivitz S, DePaola A, Bowers JC, Curriero FC, **Nachman KE***. A systematic review of post-harvest interventions for *Vibrio parahaemolyticus* in raw oysters. *Science of The Total Environment*. 2020, 745, 140795 [**corresponding author*]
62. Semba RD, de Pee S, Kim B, **Nachman KE**, Bloem MW. Adoption of the ‘planetary health diet’ has different impacts on countries’ GHG emissions. *Nature Food*. 2020, 1 (8), 481-484

63. Santo RE, Kim BF, Goldman SE, Dutkiewicz J, Biehl, EMB, Bloem MW, Neff RA, **Nachman KE***. Considering plant-based meat substitutes and cell-based meats: A public health and food systems perspective. *Frontiers in Sustainable Food Systems*. 2020, 4, 134 [*corresponding author]
64. Kaltofen M, **Nachman KE**, Hattis D. Letter concerning: Clewell (2019) Incorporation of in vitro metabolism data and physiologically based pharmacokinetic modeling in a risk assessment for chloroprene. (*Inhalation Toxicology*, in press, July 2020)
65. Halvey MR[†], Santo RE, Lupolt SN, Dilka TJ, Kim BF, Bachman GH, Clark JK, **Nachman KE***. Beyond backyard chickens: A framework for understanding municipal urban agriculture policies in the United States. (*Food Policy*, in press, November 2020) [*corresponding author]
66. Innes GK, Markos A, Dalton K, Gould CA, **Nachman KE**, Fanzo J, Barnhill A, Frattaroli S, Davis MF. How Animal Agriculture Stakeholders Define, Perceive, and are Impacted by Antimicrobial Resistance: Challenging The Wellcome Trust's Reframing Resistance Principles. (*Agriculture and Human Values*, in press, January 2021)
67. Lupolt SN^{*†}, Agnew J, Burke TA, Kennedy RD, **Nachman KE***. Key considerations for assessing soil ingestion exposures among agricultural workers. (*Journal of Exposure Science and Environmental Epidemiology*, in press, April 2021) [*joint corresponding author with student mentee]
68. Innes GK[†], **Nachman KE**, Abraham AG, Casey JA, Patton AN, Price LB, et al. 2021. Contamination of Retail Meat Samples with Multidrug-Resistant Organisms in Relation to Organic and Conventional Production and Processing: A Cross-Sectional Analysis of Data from the United States National Antimicrobial Resistance Monitoring System, 2012 - 2017. *Environmental Health Perspectives* 129:057004.
69. De Pee S, Hardinsyah, Jalal F, Kim BF, Semba RD, Deptford A, Fanzo JC, Ramsing R, **Nachman KE**, McKenzie S, Bloem MW. 2021. Balancing a sustained pursuit of nutrition, health, affordability and climate goals – The case of Indonesia. *American Journal of Clinical Nutrition* 114:1686-1697.
70. Bachman GH[†], Lupolt SN, Strauss M, Kennedy RD, **Nachman KE***. An examination of direct marketing channels and practices by Maryland fruit and vegetable farmers during the COVID-19 pandemic. (*Journal of Agriculture, Food Systems, and Community Development*, in press, July 2021)
71. Overbey KN, Hamra GB, **Nachman KE**, Rock C, Schwab KJ. 2021. Quantitative microbial risk assessment of human norovirus infection in environmental service workers due to healthcare-associated fomites. *Journal of Hospital Infection* 117:52-64.
72. Santo RE, Lupolt SN, Kim BF, Burrows RA, Evans E, Evenson B, Synk CM, Viqueira R, Cocke A, Little NG, Rupp V, Strauss M, **Nachman KE***. Characteristics and growing practices of Baltimore City farms and gardens participating in the Safe Urban Harvests study. (*Urban Forestry and Urban Greening*, in press, September 2021)

73. Lupolt SN[†], Santo RE, Kim BF, Green C, Codling E, Rule AM, Chen R, Scheckel KG, Strauss M, Cocke A, Little NG, Rupp VC, Viqueira R, Illuminati J, Epp Schmidt A, **Nachman KE***. The Safe Urban Harvests study: A community-driven cross-sectional assessment of metals in soil, irrigation water, and produce from urban farms and gardens in Baltimore, MD. *Environmental Health Perspectives*, 2021. <https://doi.org/10.1289/EHP9431>
 74. McPartland J, Shaffer RM, Fox MA, **Nachman KE**, Burke TA, Denison RA. Charting a Path Forward: Assessing the science of chemical risk evaluations under the Toxic Substances Control Act in the context of recent National Academies recommendations. (in press, *Environmental Health Perspectives*, November 2021)
 75. Wallinga D, Smit LAM, Davis MF, Casey JA, **Nachman KE***. A Review of the Effectiveness of Current US Policies on Antimicrobial Use in Meat and Poultry Production. (in press, *Current Environmental Health Reports*, February 2022)
 76. Lupolt SN, Santo RE, Kim BF, Burke TA, **Nachman KE***. Urban soil safety policies: the next frontier for mitigating lead exposures and promoting sustainable food production. (in press, *Geohealth*, August 2022).
 77. Lupolt SN[†], Agnew J, Ramachandran G, Burke TA, Kennedy RD, **Nachman KE***. A qualitative characterization of meso-activity factors to estimate soil exposure for agricultural workers. *Journal of Exposure Science and Environmental Epidemiology*. 2022. <https://doi.org/10.1038/s41370-022-00484-z>.
 78. Woodruff TJ, Rayasam SDG, Axelrad DA, Koman PD, Chartres N, Bennett DH, Birnbaum LS, Brown P, Carignan CC, Cooper C, Cranor CF, Diamond ML, Franjevic S, Gartner EC, Hattis D, Hauser R, Heiger-Bernays, Joglekar R, Kam J, Levy JI, MacRoy PM, Maffini MV, Marquez EC, Morello-Frosch R, **Nachman KE**, Nielsen GH, Oksas C, Abrahamsson DP, Patisaul HB, Patton S, Robinson JF, Rodgers KM, Rossi MS, Rudel RA, Sass JB, Sathyanarayana S, Schettler T, Shaffer RM, Shamasunder B, Shepard PM, Shrader-Frechette K, Solomon GM, Subra WA, Vandenberg LN, Varshavsky JR, White RF, Zarker K, Zeise L. Setting a Health-Protective, Scientific Agenda for Chemical Policy: Overview and Consensus Statement. *Environ Health* 21 (Suppl 1), 132 (2023) <https://doi.org/10.1186/s12940-022-00930-3>
 79. Maffini MV, Rayasam SDG, Axerad DA, Birnbaum LS, Cooper C, Franjevic S, MacRoy PM, **Nachman KE**, Patisaul HB, Rodgers KM, Rossi MS, Schettler T, Solomon GM, Woodruff TJ. Advancing the Science on Chemical Classes *Environ Health* 21 (Suppl 1), 120 (2023). <https://doi.org/10.1186/s12940-022-00919-y>
 80. Casey JA, Tartof SY, Davis MF, **Nachman KE**, Price LB, Liu C, Yu K, Gupta V, Tseng HF, Pressman AJ, Rudolph K. Impact of a statewide livestock antibiotic use policy on resistance in human urine *Escherichia coli* isolates: a synthetic control analysis. (provisionally accepted, *Environmental Health Perspectives*, January 2023)
- Lupolt SN, Newmeyer MN, Lyu Q, Prasse C, **Nachman KE**. Optimization of a method for collecting infant and toddler urine for non-target analysis using cotton pads and commercially available disposable diapers. (submitted, December 2022)

Articles and Editorials Not Peer Reviewed

Lawrence RS, **Nachman KE**, Smith TJS. “Antibiotics: make more data available.” *Nature*, 2013 Aug 22;500(7463):400.

Kim BF, **Nachman KE**, Neff RA, Santo R, Spiker ML. “Concerns re: interpretation and translation of findings in Energy use, blue water footprint, and greenhouse gas emissions for current food consumption patterns and dietary recommendations in the US.” *Environmental Systems and Decisions* 2016;36(1):104-105.

Book Chapters

Kim B, Horrigan L, McKenzie SE, **Nachman KE**. Food Animal Production. In: Neff RN, ed. Food Systems & Public Health. Publication pending.

Practice-Related Technical Reports

Nachman KE, Zablotsky JS, Resnick B, Burke TA, “A Profile of Maryland Environmental Public Health Practice” Report, March 2005.

Fox MA, Resnick B, Janus E, Curriero F, Kulbicki K, Navas-Acien A, Chari R, Neff R, **Nachman KE**, Zablotsky JS, Burke TA. “Spring Valley Public Health Scoping Study – Final Report.” May 2007.

Frey C, Paul J, Pascual P, Bangs G, Clipper M, Gallagher K, Hetes B, Messner M, **Nachman K**, Ozkaynak H, Pekar Z, and Setzer W. “Using Probabilistic Methods to Enhance the Role of Risk Analysis in Decision-Making With Case Study Examples.” EPA/100/R-09/001, August 2009.

Fox MA, Resnick B, **Nachman KE**, MacDonald L, Truant P, McGinty M, Le J, Burke T. “Follow-up on Spring Valley Health Study.” May 2013.

Nachman KE, Kim BF, Laestadius LI, Lawrence RL, McKenzie SE, Smith TJS, Truant P, Martin RP. “Industrial Food Animal Production in America: Examining the Impact of the Pew Commission’s Priority Recommendations.” October 2013.

Smith TJS, **Nachman KE**. “An Expert Assessment of Hormones in Food: A Report to the Program on Reproductive Health and the Environment of the University of California, San Francisco.” October 2013. *The findings of this report were used to establish an RFP and funding stream at the California Breast Cancer Research Program on the topic of hormone exposures from animal production and meat consumption.*

Smith TJS, **Nachman KE**. “Caramel Color and 4-Methylimidazole in Soda: A Cancer Risk Assessment: A Report to Consumers Union.” October 2013. *As a result of this work, done in collaboration with scientists at Consumers Union, major producers of soft drinks intervened to lower the levels of 4-methylimidazole in their beverages (this was later confirmed by subsequent Consumer Reports testing).*

Milton D, Sapkota A, Wilson, S, Sangaramoorthy T, Jiang C, Boyle M, Dalemarre L, **Nachman K** et al. “Potential Public Health Impacts of Natural Gas Development and Production in the Marcellus Shale in Western Maryland.” July 2014.

Davis BJK, Li CX, **Nachman KE**. “A Literature Review of the Risks and Benefits of Consuming Raw and Pasteurized Cow's Milk: A response to the request from The Maryland House of Delegates' Health and Government Operations Committee”. December 2014. *Upon a request from the Maryland legislature, the findings of this assessment were presented to the Maryland General Assembly in January 2015; the briefing aided legislators in their consideration of a bill to lift the ban on direct farm sale of unpasteurized (“raw”) milk.*

Lam Y, Fry JP, Hu E, Kim BF, **Nachman KE**. “Industrial Food Animal Production in Low- and Middle-Income Countries: A Landscape Assessment”. May 2016.

Kim BF, McKenzie SE, **Nachman KE**. “To Safeguard the US Food Supply Chain During the Covid-19 Pandemic, We Must Protect Food and Agricultural Workers: Recommendations for Policymakers and Employers”. May 2020. *In response to a request from the International Brotherhood of Teamsters, we developed these recommendations for governments and industry to protect food production workers early in the COVID-19 pandemic. Our policy brief and recommendations were presented at a national meeting of the Teamsters, and the brief became a part of the IBT's advocacy on worker safety.*

Santo RE, Lupolt SN, Kim BF, **Nachman KE**. “Safe Urban Harvests: An Assessment of Urban Farms and Community Gardens in Baltimore City” Report, June 2021 <https://clf.jhsph.edu/publications/safe-urban-harvests-study-assessment-urban-farms-and-community-gardens-baltimore-city> *This report, alongside numerous peer-reviewed publications on the findings of the Safe Urban Harvests Study, served as the foundation for advising the Baltimore Office of Sustainability regarding revisions to its Soil Safety Policy.*

Risk Communication and Other Blogs

Nachman KE. “Scientists Respond to Sen. Grassley’s Criticism of Time Magazine Piece ‘Getting Real About the High Price of Cheap Food’”, October 9, 2009. Civil Eats (<http://www.civileats.com>)

Nachman KE. “The Hidden Hazard of Poultry Litter Pelletization”, June 15, 2010. Livablefuture Blog (<http://livablefutureblog.com>)

Nachman KE. “Salmonella Outbreak: USDA Gets It Half-Right”. August 4, 2011. Livablefuture Blog (<http://livablefutureblog.com>)

Nachman KE. “You’ve Got Mail: Antibiotic Resistance, Animal Ag, and More”. September 7, 2011. Livablefuture Blog (<http://livablefutureblog.com>)

Nachman KE. “Move to Strike: Amendment to Arsenic Legislation Strips Bill of Its Meaning”, March 8, 2012. Livablefuture Blog (<http://livablefutureblog.com>)

Nachman KE. “Seeking answers and armed with cautious optimism about Perdue’s recent announcement”, September 10, 2014. Livablefuture Blog (<http://livablefutureblog.com>)

Nachman KE. “Antibiotics on the Farm: Feed Tickets Tell All”, September 16, 2014. Livablefuture Blog (<http://livablefutureblog.com>)

Nachman KE. “A Good Step By Perdue Chicken”, September 24, 2014. Livablefuture Blog (<http://livablefutureblog.com>)

Nachman KE. “The FDA Isn’t Fighting Antibiotic Resistance Hard Enough”, March 2016. Invited *Forum* piece for *Scientific American* (<http://www.scientificamerican.com/>).

Fitch C, Martin R, **Nachman KE.** “Limiting Antibiotics Misuse in Food Animals – Legislation We Need”, March 4, 2016. Livablefuture Blog (<http://livablefutureblog.com>).

Kim, H. [†], Rebholz, C., Caulfield, L., Ramsing, R., & **Nachman, K.*** “Intakes of Different Types of Protein Foods from 1999 to 2010.” *Public Health Nutrition*, April 5, 2019.

Nachman KE, Lupolt SN, Santo RE. Safe Urban Harvests – Short films developed to convey Safe Urban Harvests study results, best practices, and urban agriculture policies

Best practices for growing safely in urban soils: <https://youtu.be/BcNMteh1t14>

Safe Urban Harvests Study: Overview of results: <https://youtu.be/g-qWOU8al8o>

Baltimore City Soil Safety Policy: What you need to know: <https://youtu.be/RMa8fTzxAqI>

CURRICULUM VITAE

Keeve Edward Nachman

PART II

TEACHING

Advisees

Saima Cheema, MD, MPH (MPH capstone advisee), May 2010
Michael Crupain, MD, MPH (MPH capstone advisee – Preventive Medicine residency), May 2011
Yitzchak Lax, MHS (Environmental Health Sciences), 2010 - 2011
Ashley White, BA/MHS (Environmental Health Sciences), 2011 - 2012
Beth Brewer, MHS (Environmental Health Sciences), May 2012
Kenneth Felsenstein, BA/MHS (Environmental Health Sciences), 2011 - 2012
Charissa Williar, MPH (Environmental Health Sciences), May 2012
Karen Shore, MPH (part-time), May 2013
Martin Fogl, MHS (Environmental Health Sciences), May 2013
Paul Ryberg, MS (Environmental Science and Policy, Environmental Planning), May 2013
Caroline Katz, BA/MHS (Environmental Health Sciences), 2012-2013
Jessica VanHook, MPH (part-time internet-based MPH capstone advisee), May 2014
Alexander Ting, MHS (Environmental Health Sciences), May 2014
Anne Bertuninson, MPH (part-time internet-based MPH capstone advisee), December 2014
Colby Eisen, MHS (Environmental Health Sciences), May 2015
Douglas Woods, MPH (part-time), December 2015
Sarah Triglio, MPH (part-time MPH capstone advisee), December 2015
Lisa Poirier, MHS (Environmental Health Sciences), May 2016
Anne Welde, MPH (MPH capstone advisee), May 2016
Andrew Stolbach, MPH (part-time), May 2016
Cara Schulte, MHS (Environmental Health Sciences), May 2017
Harpreet Pannu, MPH (MPH capstone advisee), May 2017
Atul Aravindakshan, MPH (MPH capstone advisee), May 2017
Jin Young Park, MPH (part-time), May 2017
Jasmine Selemitsos, MPH (part-time), December 2017
Adrienne Kramer, MHS, May 2018
Abigail Reich, MPH, May 2018
Maya Spaur, ScM (Environmental Health and Engineering), May 2019
Maegan McBride, MPH, May 2019
Raia Contractor, MPH, May 2019
Barrett LaRussa, MPH, May 2019

Maliha Choudhury, MHS, July 2019
Ian Woodworth (MPH capstone advisee), May 2019
Hattie DeLisle (part-time internet-based MPH capstone advisee), May 2019
Mandy Liao (part-time internet-based MPH capstone advisee), May 2019
Kayla Meza, MPH, May 2020
Yiguang Zhu, MHS, May 2020
Nolan Dowd (MPH capstone advisee), May 2020
Grace Bachman, MHS (capstone advisee, Health Behavior and Society), March 2021
Sara Lupolt, PhD (Environmental Health & Engineering), June 2021
Brianna Bradley, MPH, May 2021
Jillian Tse, MPH/Bloomberg American Health Fellow, May 2021
Aimee Bourey, ScM (Environmental Health and Engineering), May 2022
Shelby Luce, MPH (part-time), May 2022
Kitty Fisher, MPH, May 2022
Naomi Tice, MPH, May 2022
Lisa Weltzien, MPH, May 2022
Qinfan Lv, ScM (Environmental Health & Engineering), expected May 2023
Christina LiPuma, MPH, expected May 2023
Alexander Welna, MPH, expected May 2023
Iman Habib, ScM (Environmental Health and Engineering), expected May 2024
Elizabeth Chatpar, ScM (Environmental Health and Engineering), expected May 2024
Beth Brewer Riess, DrPH (Environmental Health & Engineering), expected May 2024
Andrea Chiger, PhD (Environmental Health & Engineering), expected May 2024
Hannah Holsinger, DrPH (Environmental Health & Engineering), expected May 2024
Andrea Jacobson, MPH, expected May 2024
Amanda Geyer, MPH (part-time), expected May 2024
Chase McNulty, MPH (part-time), expected May 2024
Kelsey Mueller, MPH (part-time), expected May 2024
Tara McGinty, MPH, expected May 2024
Neva Jacobs, DrPH (School-wide), expected May 2025
Aimee Bourey, PhD (Environmental Health and Engineering), expected May 2026
Mattie Boden, MPH (part-time), expected May 2026
Tessa Cushman, MPH (part-time), expected May 2026
Sarah Freeman, MPH (part-time), expected May 2026
Amanda Gatinella, MPH (part-time), expected May 2026

Liza Goss, MPH (part-time), expected May 2026
Amy Mullan, MPH (part-time), expected May 2026
Danielle Nabak, MPH (part-time), expected May 2026

Preliminary Oral Participation

Soawapak Hinjoy, Epidemiology, August 2010
Robert Borotkanics, Environmental Health Sciences, February 2012
Laura Zheng, Environmental Health Sciences, June 2012
Stacy Woods, Environmental Health Sciences, November and December 2013
Ben Davis, Environmental Health Sciences, November and December 2014
Kyle Dunn, Health Policy and Management, August 2015
Philip McNab, Health, Behavior and Society, September 2015
Megan Wallace, Epidemiology, April 2016
Miranda Spratlen, Environmental Health Sciences, May and July 2016
Ann Carroll, Environmental Health Sciences, June 2016
Chrys Cronin, Environmental Health Sciences, July 2016
Martha Powers, Environmental Health & Engineering, October 2016
Jennifer Rous, Environmental Health & Engineering, February 2017
Sarah Attreed, Environmental Health & Engineering, March 2017
Ian Sanchez, Environmental Health & Engineering, March 2017
Hyunju Kim, International Health, October 2017
Katie Overbey, Environmental Health & Engineering, May 2018
Maya Spaur (ScM), Environmental Health & Engineering, June 2018
Gabriel Innes, September 2018 and October 2018
Amelie Hecht, Health Policy and Management, October 2018
Qifang Bi, Epidemiology, November 2018
Andrew Patton, Environmental Health & Engineering, January 2019 and June 2019
Sara Lupolt, Environmental Health & Engineering, March and April 2019
Donia Moustafa (ScM), May 2019
Kyle Aune, Environmental Health & Engineering, August 2019
Joseph Yracheta, Environmental Health and Engineering, September 2019
Monica Lee, Environmental Health and Engineering, January 2020
Hannah Holsinger, Environmental Health and Engineering, April 2020 and May 2020
Ian Yesilonis, Earth and Planetary Sciences, November 2020
Elsie Moore, Environmental Health and Engineering, July 2021

Lais Miachon, International Health, September 2021
Andrea Chiger, Environmental Health and Engineering, September 2021
Kayla Iuliano, Environmental Health and Engineering, October 2021 and January 2022
Elizabeth Graham, International Health, October 2021
Aimee Bourey (ScM), Environmental Health and Engineering, October 2021
Andrea Chiger, Environmental Health and Engineering, November 2021
Tyler Smith, Environmental Health and Engineering, November 2021
Emma Clare Lewis, International Health, December 2021
Beth Riess, Environmental Health and Engineering, February 2022
Jessica Cargill, Environmental Health and Engineering, February 2022
Qinfan Lv (ScM), Environmental Health and Engineering, June 2022
Steven Sola, Environmental Health and Engineering, June and August 2022
Anna Tillery, Environmental Health and Engineering, July 2022
Molly Schwalb, Epidemiology, August 2022

Thesis Reader

Anne Nigra, ScM, Epidemiology, May 2016
Sara Solon-Hanover, MSPH, Health, Behavior and Society, May 2018
Maya Spaur, ScM, Environmental Health & Engineering, May 2019
Aimee Bourey, ScM, Environmental Health & Engineering, May 2022

Thesis Committee Membership

Katie Overbey, Environmental Health & Engineering, May 2020
Gabriel Innes, Environmental Health & Engineering, May 2020
Alexandra Lorentz, Environmental Health & Engineering, May 2020
Elsie Moore, Environmental Health & Engineering, December 2022

Thesis Defense Committee

Yukyan Lam, PhD, International Health, May 2017
Megan Wallace, DrPH, Epidemiology, August 2017
Gabriel Innes, PhD, Environmental Health & Engineering, March 2020
Katie Overbey, PhD, Environmental Health & Engineering, March 2021
Sara Lupolt, PhD, Environmental Health & Engineering, June 2021
Elizabeth Thomas, PhD, International Health, August 2021
Taylor Etzel, PhD, Environmental Health and Engineering, February 2022

Quinn Marshall, PhD, International Health, August 2022 (chair)

Chris Brueck, PhD, Environmental Health and Engineering, December 2022

Massive Open Online Course Instruction – Coursera Platform

Primary Instructor (2013 – Present)

- Course: An Introduction to the U.S. Food System: Perspectives from Public Health (Faculty: Drs. Keeve Nachman and Robert Lawrence) – total enrollment: 17,164; completion rate: 15% (Coursera average is between 3 – 10%)

Guest lecturer (2014 – Present)

- Course: Chemicals and Health (Faculty: Dr. Megan Latshaw)

Classroom Instruction

Johns Hopkins Bloomberg School of Public Health – Baltimore, MD

Primary Instructor

- Course: 180.606 Case Studies in Food Production and Public Health (2014 – Present, 4th and Summer Terms)
- Course: 180.620.81 Food Systems and Public Health (Co-Instructors: Drs. Robert Lawrence and Polly Walker) (2016 – Present)
- Course: 180.600.01 Introduction to the Risk Sciences and Public Policy (1st term onsite offering 2015 – Present; 3rd term online offering 2022 - Present)
- Course: 180.841.98 Introduction to Environmental Health – Barcelona Institute (2016)
- Course: 317.860.98 Risk Assessment and Food Production Practices – Barcelona Institute (2017)

Co-Instructor (with major responsibilities)

- Course: 180.620.81 Food Production, Health and the Environment (Faculty: Drs. Robert Lawrence, Keeve Nachman, and Polly Walker) (2011 – 2015)
- Course: 317.615.01 Topics in Risk Assessment (Faculty: Drs. Mary Fox and Keeve Nachman) (2013 – Present)
- Course: 317.615.81 Topics in Risk Assessment (Faculty: Drs. Mary Fox and Keeve Nachman) (2016 – Present)

Guest lecturer (2006 – Present)

- Course: Methods in Quantitative Risk Assessment (Instructor: Dr. Mary Fox)
- Course: Methods in Quantitative Risk Assessment (Online) (Instructor: Dr. Mary Fox)
- Course: Introduction to Risk Sciences and Public Policy (Instructor: Dr. Thomas Burke)
- Course: Introduction to Risk Sciences and Public Policy (Online) (Instructor: Dr. Thomas Burke)
- Course: Risk Policy, Management and Communication (Instructors: Drs. Mary Fox and Thomas Burke)
- Course: Topics in Risk Assessment (Instructors: Dr. Thomas Burke and Mr. Ronald White)
- Course: Principles of Environmental Health (Instructor: Dr. Ernst Spannake)
- Course: Mini-Med School: Food Systems, Health and a Livable Future (Instructor: Dr. Robert Lawrence)
- Course: Current Issues in Public Health (Instructor: Dr. Edyth Schoenrich)
- Course: Public Health Practice (Instructors: Dr. Thomas Burke and Ms. Beth Resnick)
- Course: Food Technology and Health (Instructor: Dr. Jed Fahey)

- Course: Advanced Environmental Health (Instructor: Dr. Michael Trush)
- Course: Environmental and Occupational Health Law and Policy (Instructor: Dr. Paul Locke)
- Course: Chemicals and Health (Instructors: Dr. Megan Latshaw and Ms. Beth Resnick) (Coursera – MOOC)
- Course: Methods in Exposure Science (Instructors: Drs. Kirsten Koehler and Meghan Davis)
- Course: Current Issues in Policy Analysis (Instructors: Dr. Pierre-Gerlier Forest)
- Course: The Environment and Your Health (Instructors: Drs. James Yager, Joseph Bressler and Megan Latshaw)

Johns Hopkins Medical Institution – Baltimore, Maryland

Guest lecturer (2015, 2017)

- Course: Microbiology instruction (Instructor: Dr. Maunank Shah)

University of Maryland School of Public Health – College Park, MD

Guest lecturer (2008 – present)

- Course: Principles of Toxicology (Instructor: Dr. Amy Sapkota)
- Course: Introduction to Risk Assessment (Instructor: Dr. Amir Sapkota)
- Course: Introduction to Environmental Health (Instructor: Dr. Amir Sapkota)

Columbia University, Mailman School of Public Health – New York, New York

Guest lecturer (2010)

- Course: Topics in Environmental Health Sciences (Instructor: Dr. Joseph Graziano)

University of California, San Francisco – San Francisco, CA

Guest lecturer (2010 – 2016)

- Course: Reach the Decision Makers (Instructors: Dr. Tracey Woodruff and Ms. Patrice Sutton)

Dartmouth Institute for Health Policy and Clinical Practice – Hanover, NH

Guest lecturer (2012)

- Course: Environmental and Occupational Health (Instructors: Drs. Carolyn Murray and Robert McLellan)

Other instruction

- Johns Hopkins Center for Talented Youth (CTY) – Course: “U.S. Food Systems from a Public Health Perspective” 1-day course for middle and high school students and parents (2014 – 2015)

RESEARCH GRANT PARTICIPATION

Current

- Leveraging Time-Activity Data to Improve Exposure Estimation and Lung Health Interventions in Environmental Justice Communities (12/2022 – 11/2023), Johns Hopkins BREATH Children’s Center (supported by NIEHS award P2CES033415)
 - PI: Sara Lupolt (\$20,000, no salary support)
 - This pilot study aims to collect high-resolution time-activity pattern data for children in a fenceline community and develop quantitative adjustment factors for air pollutant exposure estimation for children in fenceline communities.
 - Role: Co-Investigator

- Neurotoxicity Due to Environmental Complex Metal Mixtures Exposures (9/20/2022 – 8/31/2025)
NIH/NINDS 1RF1NS130672-01
 - MPIs: Fenna Sille, Shyam Biswal, Keeve Nachman, Thomas Hartung (\$2,421,557, 9% salary years 1 - 5)
 - The objective of this project is to evaluate the influence of metal mixtures on the incidence on neurological disorders across the lifespan. Specifically, we will examine the mechanistic perturbations and clinical markers of neurological disease as a function of exposure to individual metals (lead, chromium, cadmium, and arsenic), and resulting from exposures to mixtures of these chemicals. Implications for risk assessment will be explored, and we will assess the potential for development of quantitative modifying factors to better predict neurological disease risks.
 - Role: Principal Investigator
- Environmental Monitoring and Assessment Near Fossil and Petrochemical Infrastructure (09/01/22 – 8/31/2024), no grant number, Bloomberg Philanthropies
 - PI: Peter DeCarlo (\$2,760,000, 20% salary years 1 -3)
 - This project utilizes state-of-the art measurements of particulate matter composition and hazardous air pollutants to determine exposure and subsequent risk of air pollutants in vulnerable communities living at the fenceline of industrial facilities. We combine high spatial resolution measurements in a cumulative risk framework to improve assessment of risk at the neighborhood level.
 - Role: Co-Principal Investigator
- Petrochemicals and Cumulative Risk Postdoctoral Fellowship (9/14/2022 – 8/13/2023), no grant number, Environmental Defense Fund
 - PI: Keeve Nachman (\$79,287, 7% salary)
 - The objective of this funding is to support a postdoctoral fellow to develop cumulative risk analyses with the Bloomberg Initiative-funded petrochemicals team and to assist scientists at the Environmental Defense Fund in their work on EPA Toxic Substances Control Act risk evaluations.
 - Role: Principal Investigator
- Curbing the use of medically important antibiotics in food production: profiles of low- and middle-income countries (LMICs) and guidance for identifying priority interventions (11/1/2022 – 10/31/2023), no grant number, Tiny Beam Fund
 - PI: Keeve Nachman (\$25,0000, no salary)
 - The objective of this project is to use the Kim Diet-Climate-Nutrition model to assess the value of varying dietary interventions on the use of antimicrobials in food production in low- and middle-income countries.
 - Role: Principal Investigator

- INnovations to generate estimates of children's soil/dust inTake (INGEST) (8/1/2021 – 6/30/2024), EPA R840200
 - PI: Keeve Nachman (\$1,350,000, 25% salary years 1 - 3)
 - The objectives are to longitudinally characterize lifestyle- and developmental milestone-specific macro-activity and microenvironmental patterns for children, prospectively collect and analyze in-home macro-activity video footage to describe the environmental and human factors that modify children's micro-activity patterns and identify organic chemical fingerprints in three environmental and two biological samples using non-targeted analytical approaches to propose novel organic candidate tracer compounds and tracer mixtures for estimation of children's soil and dust intake.
 - Role: Principal Investigator
- Fate and Transport of Unregulated Organic Contaminants in Biosolids - Development of a Human and Environmental Exposure Risk Framework (9/1/2021 – 8/31/2024), EPA R840247
 - PI: Carsten Prasse (\$1,498,000, 20% salary years 1 – 3)
 - The goal of this research is to develop a flexible framework for the prioritization of biosolids-associated organic contaminants (BOCs). The objectives are to 1) characterize the occurrence, fate, and transport of BOCs after land application of biosolids; 2) model BOC exposures and perform hazard and risk assessments to identify high-priority BOCs; and 3) utilize an array of communication channels to translate our findings and methodology for the wastewater and agriculture communities, regulators, and the general public.
 - Role: Co-Principal Investigator
- Transit's Path Forward in a Pandemic: Uniting Public Health Policy and Transportation Policy through the Scientific Analysis of Aerosols and an Integrated Epidemiological and Agent-Based Mobility Model (5/27/2021 – 5/26/2023), Subcontract to NY Mass Transit Administration under Federal Transit Administration funding
 - PI: Keeve Nachman (\$275,000, 20% salary)
 - Our goal is to take a cross-disciplinary systems approach that meaningfully integrates the scientific knowledge base with the operational expertise of stakeholders from the transportation sector. Such an approach is needed to identify the most effective and efficient immediate- and longer-term strategies to assure safe operation and ridership of MTA transit services. Underlying this approach is a framework for risk-based decision making that draws upon the knowledge of experts in public health and transportation science, contextualizing their approaches in the needs of the decision-makers.
 - Role: Principal Investigator
- Urban Aquaculture for Climate Justice and Local Food Sovereignty (06/01/21-05/30/23) Johns Hopkins University, Alliance for a Healthier World
 - PIs: Nicole Labruto and Carsten Prasse (\$100,000, 4% salary, years 1 – 2)
 - This project will explore the feasibility of community-led urban aquaculture on the shoreline of south Baltimore as a possible strategy to support local food sovereignty and contribute to the restoration of urban ecosystems.

- Role: Co-Investigator
- CLF-RBA-2-FY19 Carrageenan as a source of arsenic, lead and cadmium to infant foods (3/1/2019 – 1/31/2023) Center for a Livable Future Directed Research Program
 - PI: Kieve Nachman (\$109,500, no salary support)
 - The goal of this research is to conduct an international market-basket study of infant formula foods for analysis of As species, Cd, and Pb and to use these measurements alongside complementary measurements of these metals in breast milk to conduct a comparative dietary toxic metals exposure analysis across the various types of infant foods.
 - Role: Principal Investigator
- CLF-RBA-6-FY19 Soil carbon fluxes and beef cattle: how different production systems, methodology, and scope of LCAs impact reported GHG emissions (6/1/2019 – 11/31/2023), Center for a Livable Future Directed Research Program
 - PI: Kieve Nachman (\$17,000, no salary support)
 - The goal of this research is to assess how methodological differences in ruminant-livestock life cycle assessments explain variation among study results and interpretation.
 - Role: Principal Investigator
- Maximizing the Knowledge Gained from California Senate Bill 27 (2018 – 2022) No number, Wellcome Trust
 - PI: Lance Price (\$3.5 million, no salary support 2018 – 2022)
 - The goal of this project is to supplement the support from our NIAID ARES project (below) to expand our analyses of the impacts of California Senate Bill 27 to include four animal products (beef, chicken, pork, and turkey), and three pathogens (*E. coli*, *Salmonella*, and *Campylobacter*) in both retail meat and clinical isolates. It also expands our capacity to conduct genomic analyses and characterize the population dynamics of *E. coli*.
 - Role: Co-Investigator
- Antimicrobial Resistant *E. coli* before and after California Senate Bill 27 (ARES): A Natural Experiment (05/09/2017 – 04/30/2022), NIH/NIAID 1R01AI130066-01A1 REVISED
 - PI: Sara Tartof, Kaiser Permanente of Southern California (\$4,026,995, 10%, 5% salary support, years 1,5 and 2-4, respectively)
 - This project aims to leverage whole genome sequencing and expansive electronic health record data to determine whether an upstream, statewide policy to reduce antibiotic use in livestock production will have a down-stream, beneficial impact on human health.
 - Role: Principal Investigator (JHU site)

Pending

- Drinking Water as a Driver of Health Disparities in Urban Populations, NIH/NIEHS
 - PI: Kellogg Schwab (\$2,500,000, 5% salary years 1-5)

- This grant will incorporate environmental justice principles into drinking water exposure science including a community-based participatory research approach to assess whether low-income urban populations are disproportionately exposed to lead and *Legionella* due to old pipes, stagnant water, and a lack of maintenance of drinking water systems outside of the public domain.
- Role: Co-Investigator

Completed

- Environmental Monitoring and Assessment Near Fossil and Petrochemical Infrastructure (10/1/2021-8/31/2022), Bloomberg Philanthropies
 - PI: Peter DeCarlo (\$1,073,161, 15% salary)
 - This pilot study leverages multiple air pollution measurement platforms to improve the characterization of neighborhood scale exposure and risk to a suite of hazardous air pollutants in fenceline communities near petrochemical infrastructure.
 - Role: Co-Investigator
- Characterizing the Spatial Temporal Dynamics and Human Health Risks of *Vibrio parahaemolyticus* Bacteria in Estuarine Environments (2016 – 2022), NIH/NIAID
 - PI: Frank Curriero (\$2,800,000, 15% salary support [2016 – 2021])
 - Role: Co-Investigator. I will aid in development and conduct of the quantitative microbial risk assessment (QMRA) in support of estimation of burden of *Vibrio parahaemolyticus* infections resulting from consumption of shellfish from two distinct estuarine environments.
- The Ending Drinking Water Disparities - A Community Right to Know project (7/1/21 – 6/30/22), Bloomberg American Health Initiative
 - PI: Fox, (\$59,725, 7% salary support)
 - Main Objectives: The project will evaluate water quality reporting under the Safe Drinking Water Act and develop user-centered design recommendations for improved consumer communication.
 - Role: Co-Investigator
- USDA GNE-19-209 Healthy Soils, Healthy Farmers: Assessing farmers' soil contact activities & soil contamination on urban & rural farms (8/1/2019 – 7/31/2021), United States Department of Agriculture/Sustainable Agriculture Research and Education Program
 - PI: Keeve Nachman (\$15,000, 1% salary support 2019-2021)
 - The proposed research aims describe the soil contact activities and behaviors of urban and rural farmers and update an existing survey tool to quantify farmers' soil contact activities for future occupational health assessments; and measure and compare soil contaminant concentrations on rural and urban farms to contextualize risks of potential exposure to soil contaminants in Maryland.
 - Role: Principal Investigator

- USDA-NACA Cooperative Agreement for urban agriculture research (2019 – 2020), 58-8040-8-021 United States Department of Agriculture, Agricultural Research Service
 - PI: Keeve Nachman (\$83,000, 1% salary support 2019-2020)
 - The goal of this pilot project is to leverage samples from the Safe Urban Harvests study to explore exposures to residues of organic contaminants and to facilitate comparisons of nutrient content across urban-grown and retail produce.
 - Role: Principal Investigator
- Partnering with City Government to Advance Urban Agriculture Safety in Baltimore City (2018 – 2019) No number, Johns Hopkins Lipitz Public Health Policy Faculty Award
 - PI: Keeve Nachman (\$15,000, no salary support)
 - The goal of this project is to use findings from the Safe Urban Harvests study to develop evidence-based recommendations to aid the Baltimore Office of Sustainability in revising the City's urban agriculture soil safety policy, and to create and distribute a collection of free, print and electronic informational resources to encourage the safe conduct of urban agriculture.
 - Role: Principal Investigator
- CLF-RBA-4-FY19 Hurricane Florence Flooding in North Carolina: Mobilization of Contaminants by Extreme Flood Events and Impact on Human Exposure (9/1/2018 – 2/31/2020), Center for a Livable Future Directed Research Program
 - PI: Keeve Nachman (\$53,984, no salary support)
 - The goal of this project is to perform a rapid-response assessment of water contamination in flooded rivers to characterize the potential for increased human exposures of direct relevance to health to inform preparedness activities in the U.S. and globally for storms that produce heavy flooding in areas with dense animal production.
 - Role: Principal Investigator
- The law of unintended consequences: Will the implementation of California SB27 impact animal health and well-being? (2017 – 2018) No number, Johns Hopkins Practical Ethics Award
 - PIs: Davis, Meghan and Fanzo, Jessica (Co-PIs, \$67,500, 1% salary support 2017-2018)
 - The goal of this project is to characterize the immediate impact of SB27 on animal health and welfare and examine ethical trade-offs associated with the California law.
 - Role: Co-Investigator
- Building a baseline for assessing the human health impact of a landmark legislative intervention on antibiotic use in industrial poultry production (2017/01/01 - 2017/12/31) 010NAC2017, Johns Hopkins Fisher Center Discovery Program
 - PI: Keeve Nachman (\$49,000, 1% salary support [2017])
 - The goal of this project is to develop a biorepository of E. coli isolates from retail chicken meat and human urinary tract infections to serve as a baseline in assessing the impact of California Bill SB27, a legislative intervention aimed at combatting antimicrobial resistance through restrictions on agricultural antimicrobial use.

- Role: Principal Investigator
- CLF-RBA-6-FY16 The Safe Urban Harvests Study of Urban Agriculture Participants in Baltimore City (1/1/2016 – 12/31/2017), Center for a Livable Future Directed Research Program
 - PI: Keeve Nachman (no salary support)
 - The purpose of this study is to characterize exposures to toxic metals among urban agriculture practitioners in Baltimore City and for those consuming urban-grown produce.
 - Role: Principal Investigator
- Behavioral Patterns and Potential Exposure Risks among Baltimore Urban Foragers (7/2014 – 12/2016), United States Department of Agriculture, Forest Service
 - PI: Keeve Nachman (\$42,970, 8% salary support [2014])
 - This study aims to understand the foraging behaviors among Baltimore urban foragers in order to facilitate the modeling of cancer risks and non-cancer hazards related to chemical contaminant exposures.
 - Role: Principal Investigator
- Visualizing Opportunities for a Food Animal Atlas: A Scoping Project (9/2014 – 9/2015), the Clarence Heller Charitable Foundation, GRACE Communications Foundation, Panta Rhea Foundation, and the Thread Fund
 - PI: Keeve Nachman (\$35,000 [through 2 grants and 2 gifts], 3% salary support [2014-15])
 - This goal of this project is to conduct a landscape assessment and evaluation of the data resources needed to create a dynamic, geospatially-referenced atlas of the components of the industrial food animal production sector in the United States
 - Role: Principal Investigator
- CLF-RBA-14-FY14 A market-basket study of turkey meat products to assess exposures to nitarsone, inorganic arsenic, and other arsenic species and corresponding risks (3/1/2014 – 3/31/2015), Center for a Livable Future Directed Research Program
 - PI: Keeve Nachman (\$87,283, no salary support)
 - The goal of this project was to conduct a 3-city market basket study to support the estimation of daily dietary exposures to arsenic species among turkey consumers and estimated cancer risks associated with ingestion of iAs attributable to nitarsone use in animal production.
 - Role: Principal Investigator
- Antibiotic and other residues in poultry products sold in grocery stores pilot project (7/2012 – 1/2013), The Pew Charitable Trusts
 - PI: Keeve Nachman (\$15,000)
 - Main Grant Objective: The purpose of this study is to characterize the residues of 59 pharmaceuticals and personal care products in retail poultry meat for the purpose of estimation of human exposure through chicken consumption.
 - Role: Principal Investigator
- Understanding Urban Gardeners' Perceptions of Risk from Soil Contamination: Identifying and Sharing Resources to Mitigate Contaminant Exposure (9/2011 – 9/2012) Johns Hopkins Urban Health Institute
 - PI: Keeve Nachman (\$10,000)
 - The purpose of this study is to characterize the perceptions of risk from garden-based soil contaminants among urban community gardeners in Baltimore City, and to identify gaps in

- knowledge and information resources which could prove helpful in understanding and mitigating these risks.
 - Role: Principal Investigator
- Follow-up on Spring Valley Health Study (9/2011-8/2012), District of Columbia Department of Environment
 - PI: Mary Fox (\$250,000)
 - The project responds to continuing community concerns regarding environment and health related to historical activities (WWI chemical weapons development, testing, and related waste disposal) and ongoing remediation of buried munitions and contaminated soil.
 - Role: Co-Investigator, responsible for leading environmental health assessment.
- Consumer Reports testing project (August 2012 – December 2013), Consumer Reports
 - PI: Keeve Nachman (\$57,000, no salary support)
 - The purpose of this study is to design and conduct a confidential testing project for a foodborne contaminant for the Consumer Reports magazine from start to finish, including advising on product selection, selection of laboratory, sample preparation, data analysis and risk estimation and characterization.
 - Role: Principal Investigator
- CLF-RBA-3-FY11 Roxarsone, Inorganic Arsenic, and Other Arsenic Species in Chicken: A U.S.-Based Market Basket Sample (3/1/2014 – 3/31/2015), Center for a Livable Future Directed Research Program
 - PI: Keeve Nachman (\$185,500, no salary support)
 - The goal of this project was to conduct a 10-city market basket study of retail chicken to characterize arsenic species exposures and corresponding cancer risks associated with roxarsone use in industrial chicken production among poultry consumers.
 - Role: Principal Investigator

ACADEMIC SERVICE

Division and/or Department

JHSPH Department of Environmental Health and Engineering PhD Committee (Exposure Sciences and Environmental Epidemiology and Sustainability tracks) (2014 – present)

JHSPH Department of Environmental Health and Engineering DrPH Committee (2011 – present)

JHSPH Department of Environmental Health and Engineering MHS Committee (2011 – present)

JHSPH Department of Environmental Health Sciences MHS Admissions Committee (2013 – present)

JHSPH Department of Environmental Health Sciences MSPH in Toxicology Testing and Human Health Risk Assessment committee (2013 – present)

JHSPH Department of Environmental Health and Engineering Practice and Policy Committee (2013 – present; Committee Chair 2020 - present)

JHSPH Department of Environmental Health Sciences Summer Institute Planning Committee (2015 – present)

JHSPH Department of Environmental Health & Engineering Research Committee (2016 – 2021)

JHSPH Department of Environmental Health & Engineering Educational Programs Committee (2019 – 2020)

JHSPH Department of Environmental Health & Engineering Strategic Planning Committee (2019 – present)

JHSPH Department of Environmental Health & Engineering Sustainability PhD track planning committee (2019 – 2021)

JHSPH Department of Environmental Health & Engineering Environmental Sustainability, Resilience, and Health PhD Track Director (2021 - present)

JHSPH Department of Environmental Health and Engineering Executive Committee (2020 – present)

School

JHSPH Faculty Senate (2015 – 2017, 2019 - 2021)

JHSPH Interdepartmental Implementation Science Committee (2012 – 2015)

JHU Sustainability Leadership Council Research Committee (2019 – present)

Search Committee for Chair of the Department of Health Policy and Management (2021 – 2022)

Baltimore Community Engagement Committee (2021 – present)

Obesity and the Food System Steering Committee, Bloomberg American Health Initiative (2022 – present)

Evidence Workgroup, Bloomberg American Health Initiative (2022 – present)

PRESENTATIONS

Scientific Meetings

Resnick B, Burke, T, **Nachman KE**, Zablotsky J. *The Profile of Maryland Environmental Public Health Practice*. Maryland Conference of Local Environmental Health Directors. Annapolis, MD. September 2003.

Streeter R, Malecki K, Ettinger A, Herbstman J, **Nachman KE**, Resnick B, Burke T. Environmental Public Health Tracking: Laying the Foundation. Geomed Conference - Baltimore, MD. October 2003.

Resnick B, Burke T, Zablotsky J, **Nachman KE**. Academic-Practitioner Partnerships in Action: Enhancing Maryland Environmental Public Health Capacity. American Public Health Association Annual Meeting. San Francisco, CA. November 2003.

Resnick B, Burke T, **Nachman KE**, Zablotsky J. *The Profile of Maryland Environmental Public Health Practice*. Maryland Conference of Local Environmental Health Directors. Annapolis, MD. December 2003.

Burke T, Resnick B, **Nachman KE**, Zablotsky J. *Environmental Public Health: Past and Future*. National Center for Environmental Health Annual Conference. Atlanta, GA. December 2003.

Burke T, Resnick B, **Nachman KE**, Zablotsky J. *Center Activities and Accomplishments*. Centers for Disease Control and Prevention Year Three Capacity Building Meeting. Atlanta, GA. March 2004.

Resnick B, **Nachman KE**, Zablotsky J. *The Profile in Maryland Environmental Health Practice—An Update*. Maryland Conference of Local Environmental Health Directors. Annapolis, MD. March 2004.

Resnick B, Malecki K, **Nachman KE**, Zablotsky J, Streeter R, Herbstman JB, Ettinger A, Burke T. *Data Usage for Environmental Public Health Tracking: The Devil is in the Details*. Many Voices – One Vision: 2004 Environmental Public Health Tracking Program Conference. Philadelphia, PA. March 2004.

Resnick B, Zablotsky J, **Nachman KE**, Burke T. *The People Network: Bridging the Environment and Health Gap*. Many Voices – One Vision: 2004 Environmental Public Health Tracking Program Conference. Philadelphia, PA. March 2004.

Zablotsky J, **Nachman KE**, Burke T, Resnick B. *The Johns Hopkins Center for Excellence in Environmental Public Health Tracking*. Many Voices – One Vision: 2004 Environmental Public Health Tracking Program Conference. Philadelphia, PA. March 2004.

Resnick, B. Sherrard S, **Nachman KE**, Zablotsky J. *Local Environmental Public Health Practice in 2004 and Beyond: A Maryland Example*. National Association of County and City Health Officials Annual Meeting. St. Paul, MN. July 2004.

Nachman KE, Zablotsky J, Resnick B, Burke T. *The Profile of Maryland Environmental Public Health Practice*, American Public Health Association Annual Meeting. Washington, D.C., November 2004.

Litt J, Tran N, Chossek-Malecki K, Neff R, Resnick B, **Nachman KE**, Apelberg B, Wismann A, Burke T. *Identifying priority health conditions, environmental data and infrastructure needs: A synopsis of the Pew Environmental Health Tracking project*. American Public Health Association Annual Meeting. Washington, DC., November 2004.

Nachman KE. *Arsenic – A Roadblock to Management Options for Poultry House Waste?* EPA Regional Conference on Animal Feeding Operations. Adelphi, MD, December 2004.

Nachman KE, Breysse P. Evaluation of Risk Assessment Report for the Southwest Area Park K-9 Facility. Baltimore County Fraternal Order of Police, Lodge #4. Carnie, MD, October 2005.

Streeter R, Resnick B, Curriero F, Zablotsky J, **Nachman KE,** Burke TA. Characterizing arsenic in eastern Maryland groundwater: A community/academic collaboration. American Public Health Association Annual Meeting. Philadelphia, PA., December 2005.

Resnick B, Zablotsky J, **Nachman KE,** Burke T. Northeast Environmental Public Health Profile: An Expansion of the Maryland Profile. American Public Health Association Annual Meeting. Philadelphia, PA., December 2005.

Streeter R, Resnick B, Curriero F, Zablotsky J, **Nachman KE,** Burke T. Evidence of the Environment's Relationship to Health. American Public Health Association Annual Meeting. Philadelphia, PA., December 2005.

Nachman KE. *Arsenic – A Roadblock to Management Options for Poultry House Waste?* American Public Health Association Annual Meeting. Philadelphia, PA., December 2005.

Nachman KE. The Public Health Consequences of Arsenical Antimicrobial Drugs Used in Industrial Poultry Production. 10th Anniversary of the Johns Hopkins Center for a Livable Future. Baltimore, MD, December 2006.

Silbergeld EK, Nweke O, **Nachman KE,** Aposhian V. Arsenicals and Food Animal Production. 12th International Conference of the Pacific Basin Consortium for Environment and Health Sciences. Beijing, China, October 2007.

Sapkota A., Perodin J., Maring E.F., **Nachman K.,** Ritz B., and Shenassa E.D. Asthma Exacerbation Resulting From Exposure to Traffic Exhaust: A Meta-Analysis (Poster), November 2008.

Gaber N, Foley G, **Nachman K,** Sunderland E. Evaluation Practices used across EPA for Determining when an Environmental Model is Suitable for Informing Decisions. Society for Risk Analysis Annual Meeting, December 2008.

Nachman KE. From Farm to Tap: Impacts of Intensive Animal Agriculture on Water Quality and Human Health. Invited seminar, Mississippi River Basin Agriculture Caucus, Minneapolis, MN, July 2009.

Nachman KE, Parker JD. Fine Particulate Air Pollution and Asthma in Adults (Poster). International Society for Environmental Epidemiology Annual Meeting, Dublin, Ireland, August 2009.

Parker JD, Kravets NF, Woodruff TJ, **Nachman KE.** Air Pollution and Mortality for Black and White Adults in the United States: Results from the U.S. National Health Interview Survey. International Society for Environmental Epidemiology Annual Meeting, Dublin, Ireland, August 2009.

Neff RA, **Nachman KE**, Dolan K, Rosenthal A, Hartle J. Pesticide Levels in Imported Produce: Policy and Oversight Gap. 137th American Public Health Association Annual Meeting. Philadelphia, PA., November 2009.

Kim B, Kurtz-Nicholl J, Horrigan L, **Nachman KE**. Engaging youth in the food system through education. Oral presentation, 138th American Public Health Association Annual Meeting, Denver, CO, November 2010.

Nachman KE, Parker JD. Disparities in Race/Ethnicity in Relation to Air Pollution Exposure and Asthma in Adults. USEPA Symposium: Strengthening Environmental Justice and Decision Making: A Symposium on the Science of Disproportionate Environmental Health Impacts. Washington DC, March 2010.

Love DC, Rodman S, Neff R, **Nachman KE**. Importing tainted seafood: A comparison of veterinary drug residue detections by the US, EU, Canada and Japan. American Public Health Association Annual Meeting. Washington, DC, November 2011.

Nachman KE, Fain K, Shah S, Smith TJ, Fox MA. Comparability of toxicological evaluation frameworks for veterinary and human pharmaceuticals and environmental chemicals across five federal programs. Society for Risk Analysis Annual Meeting. Charleston, SC, December 2011.

Margulies J, Dix K, Kim B, Palmer A, **Nachman, K**. “Understanding Urban Gardeners’ Perceptions of Risk from Soil Contamination: Communication of Risk Knowledge and Resources between Individuals, Communities and Institutions.” 72nd Annual Meeting of the Society for Applied Anthropology, Baltimore, Maryland, March 2012.

Love DC, Halden RU, Davis MF, **Nachman KE**. “Feather Meal Contains Multiple Antimicrobials and Enrofloxacin at Levels that Inhibit Susceptible *E. coli*.” American Society of Microbiology 2012 Annual Meeting, San Francisco, California, June 2012.

Nachman KE, Smith TJ, Truant PL., “Volatile organic compounds at animal production sites – gaps in knowledge and regulatory shortcomings.” North Carolina Environmental Justice Summit, Whittakers, North Carolina, October 2012.

Smith TJ, Rubenstein LS, **Nachman KE**. “Public Access to Information about Airborne Hazardous Releases from Animal Feeding Operations”. North Carolina Environmental Justice Summit, Whittakers, North Carolina, October 2012.

Fry J, Laestadius L, **Nachman KE**, Neff RA. “The Role of State and Local Health Departments in Addressing Public Health Concerns Related to Industrial Food Animal Production and Implications for Environmental Justice.” North Carolina Environmental Justice Summit, Whittakers, North Carolina, October 2012.

Margulies J, Kim B, Dix K, Poulsen M, Palmer A, **Nachman KE**. “Understanding Urban Gardeners’ Perceptions of Risk from Soil Contamination: Identifying and Sharing Resources to Mitigate Contaminant Exposure”. American Public Health Association 2012 Annual Meeting, San Francisco, CA, October 2012.

Fry J, Laestadius L, **Nachman KE**, Neff RA. “Who is looking out for rural health? Local and state health departments’ responses to industrial food animal production in eight states”. American Public Health Association 2012 Annual Meeting, San Francisco, CA, October 2012.

Nachman KE. “Industrial Food Animal Production and Injustice”. First Annual Symposium on Environmental Justice and Health Disparities in Maryland and DC, University of Maryland, College Park, College Park, MD, November 2012.

Fry JP, Laestadius L, Grechis C, **Nachman KE**, Neff RA. “Engagement of government agencies with environmental public health issues surrounding industrial food animal production in eight states: An example of environmental public health systems research”. National Environmental Health Association 2013 Annual Educational Conference, Washington, DC, July 2013.

Fox MA, **Nachman KE**, Fain K, Smith T. “Comparing drug and chemical evaluation frameworks: Improving strength and transparency”. 141st American Public Health Association Annual Meeting, Boston, MA, November 2013.

Nadimpalli M, Rinsky J, Hall D, Pierce E, Pisanic N, Larsen J, **Nachman K**, Love D, Wing S, Stewart J, Heaney C. Persistence of livestock-associated methicillin and multidrug-resistant *Staphylococcus aureus* among industrial hog operation workers in North Carolina. 3rd ASM-ESCMID Conference on Methicillin-resistant *Staphylococci* in Animals: Veterinary and Public Health Implications. Copenhagen, Denmark, November 2013.

Maron DF, Smith TJ, **Nachman KE**. “Restrictions on antimicrobial use in food animal production: A cross-country regulatory and economic survey”. 141st American Public Health Association Annual Meeting, Boston, MA, November 2013.

Heaney C, Pisanic N, Nadimpalli M, Rinsky J, Love D, **Nachman K**, Perl TM, Wing S, Stewart J. “Concurrent Exposure to Drug-Resistant *Staphylococcus aureus*, Influenza A Virus, and Hepatitis E Virus Among Industrial Hog Operation Workers”. IDWeek, Philadelphia, PA, October 2014.

Heaney C, Pisanic N, Nadimpalli M, Rinsky J, Love D, **Nachman K**, Perl TM, Wing S, Stewart J. “*Staphylococcus aureus* CC398 and Pig-Specific Fecal Bacteroidales QPCR Concentrations Decline With Increasing Time Away From Work Among Industrial Hog Operation Workers”. IDWeek, Philadelphia, PA, October 2014.

Nachman KE. “Industrial Animal Agriculture in the Bay: Disproportionate Burden and Health Issues”. Third Annual Symposium on Environmental Justice and Environmental Health Disparities in Maryland and Washington, DC. College Park, MD. December 2014.

Nachman KE. “Transparency considerations for toxicological evaluation approaches for veterinary and human pharmaceuticals, environmental chemicals, and food and food additives across seven US federal programs”. Society for Risk Analysis Annual Meeting, Denver, CO. December 2014.

Love DC, Fry JP, West P, Engstrom P, **Nachman KE**, Lawrence RS. “Interconnections Between Agriculture and Aquaculture: Implications for a Sustainable and Resilient Food System.” Soil Science Society of America Annual Conference, Minneapolis, MN, November 2015.

Nachman KE., Ginsburg G, Miller M, Murray C, Nigra A. “Arsenic, food, U.S. policy and public health: identifying key challenges”. Collaborative on Food with Arsenic and associated Risk and Regulation (C-FARR) Conference at Dartmouth College, Hanover, NH, November 2015.

Zuidema, C, Synk C; Kim BF. Harding J, Rak S, Emery M, **Nachman KE.** “Development of an Environmental Health Risk Assessment Framework for Consumption of Foraged Items in the Urban Environment: a Baltimore, MD Case Study using Berries and Greens.” Oral Presentation at the Urban Food System Symposium (UFSS), Olathe, KS. June 2016.

Synk C; Kim BF. Rogers G, Harding J, Davis CA, Emery M, **Nachman KE.** “Gathering Baltimore’s bounty: Characterizations of urban foraging behaviors, motivations, and barriers.” Oral Presentation at the Urban Food System Symposium (UFSS), Olathe, KS. June 2016.

Synk C, Kim B, Rogers G, Harding J, Davis C, Emery M, Hurley P, & **Nachman KE.** “Gathering Baltimore’s bounty: Characterizations of urban foraging behaviors, motivations, and barriers.” Oral Presentation at the Yale Food System Symposium, New Haven, CT. September 30, 2016.

Nachman KE. “Arsenic and Diet: Translating Emerging Scientific Evidence into U.S. Public Health Policy” American Association for Advancement of Science 2017 Meeting, Boston, MA. February 2017.

Kim B, Santo R, Scatterday A, Fry J, Synk C, Mekonnen M, Hoekstra A, Neff R, **Nachman K.** Targeting Plant-Centric Dietary Interventions for Climate Change Mitigation. American Public Health Association Annual Meeting, Atlanta, GA. November 2017.

Murray C and **Nachman K.** Mitigating Dietary Arsenic Exposure: Current status in the US and recommendations for an improved path forward. American Public Health Association Annual Meeting, Atlanta, GA. November 2017.

Ramsing B, Neff R, **Nachman K**, Kim H, Hricko C. Leveraging Dietary Patterns and Policy to Mitigate Climate Impacts. American Public Health Association Annual Meeting, Atlanta, GA. November 2017.

Nigra AE, Sanchez TR, **Nachman KE**, Harvey D, Chillrud SN, Graziano JH, Navas-Acien A, Decline in arsenic exposure in the United States from 2003 to 2014: the impact of the Environmental Protection Agency maximum contaminant level. NIEHS Superfund Research Program Annual Meeting, December 2017, Philadelphia, PA.

Nachman KE. The Community Healthy Air Act. The 4th Symposium on Environmental Justice and Health Disparities in Maryland and the Washington, DC Region, May 2018, College Park, MD.

Neff R, Kim B, Hecht A, Santo R, Fry J, **Nachman K**. A GWP20/100 Analysis of Greenhouse Gas Emissions from Global Wasted Food: Educating About Methane, Agriculture and Human Values Conference, June 2018, Madison, WI.

Kim H, Rebholz CM, Caulfield LE, Ramsing B, **Nachman KE**. Trends in Dietary Sources of Protein in US Adults: Results from the National Health and Nutrition Examination Survey 1999-2010. 2018 American Society for Nutrition Annual Meeting, Boston, MA, June 2018.

Lupolt S, Santo R, Kim BF, Viqueria R, Evans E, Illuminati J, Burrows R, Swanenberg A, Huang J, **Nachman K**. Characterizing risks from heavy metal contamination in soil, irrigation water, and urban-grown produce from Baltimore City's urban farms and gardens; 2018 Urban Food System Symposium, August 2018, Minneapolis, MN.

Nachman KE: Safe Urban Harvests: Implications for Nutrition and Food Safety. USDA Beltsville Agricultural Research Center Symposium on Urban Agriculture. September 2018, Beltsville, MD.

Nachman KE. Soil and Food Safety. Soil Health Institute 2018 Conference on Connections Between Soil Health and Human Health, October 2018, Silver Spring, MD.

Lupolt S, Santo R, Kim BF, **Nachman K**. Assessing heavy metal exposures in irrigation water and growing media among urban farmers and gardeners in Baltimore, MD. 2018 American Public Health Association Annual Meeting, November 2018, San Diego, CA.

Lupolt S, Santo R, Kim BF, **Nachman K**. A comparison of toxic and beneficial metal content in urban-grown, peri-urban, conventional, and certified organic fruits and vegetables. 2018 American Public Health Association Annual Meeting, November 2018, San Diego, CA.

Nachman KE. Safe Urban Harvests: Agriculture and Human Health. American Society of Agronomy/Crop Science Society of America/Canadian Society of Agronomy 2018 Joint Meeting, November 2018, Baltimore, MD.

Burrows R, Lupolt S, Evenson B, Santo R, Kim B, **Nachman K.** Climate Change Mitigation Through Urban Agriculture: Assessing the Potential Capacity of Agricultural Production in Baltimore. Poster session presented at the Johns Hopkins mini-symposium, Changing By Degrees: Multidisciplinary Approaches to Climate Change at the National Academy of Sciences. May 2019, Washington, DC.

Lupolt S, Santo R, Kim BF, Green CE, Codling EE, Chen, R, Rule A, **Nachman K.** The Safe Urban Harvests Study: Assessing exposure to six toxic metals among urban agriculture participants in Baltimore, MD. 2019 International Society for Exposure Science/International Society for Indoor Air Quality Annual Joint Meeting, August 2019, Kaunas, Lithuania.

Santo R, Lupolt SN, **Nachman KE,** “Findings from the Safe Urban Harvests Study: A survey of soil, water, and produce from Baltimore farms and gardens” at Baltimore Ecosystem Study 21st Annual Research Conference, October 23, 2019, University of Baltimore, Baltimore, MD.

Nachman KE, Industrial Food Animal Production and Human Health. American Public Health Association Annual Meeting, Philadelphia, PA., November 2019.

Nachman KE, Shepherding science into the decision-making process: case studies in food production and public health. International Society for Environmental Epidemiology Annual Meeting, Online, August 2020.

Lupolt SN, Santo RS, **Nachman KE.** Characterizing exposures to heavy metals in urban-grown produce from Baltimore City’s urban farms and gardens. 2020 Urban Food System Symposium, October 2020, Virtual Conference.

Nachman KE, Why and How to Write an Environmental Epidemiology Commentary. International Society for Environmental Epidemiology Annual Meeting, New York, NY, August 2021.

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Invited Seminars

Burke T, Resnick B, **Nachman KE,** Zablotsky J. Local Public Health Practice. Public Health Association for Student Experience (PHASE) Lecture Series. Johns Hopkins Bloomberg School of Public Health. July 2003.

Resnick B, **Nachman KE,** Zablotsky J. *The Profile of Maryland Environmental Public Health Practice.* Maryland Department of the Environment. Baltimore, MD. September 2003.

Burke T, Resnick B, Malecki K, Streeter R, **Nachman KE**. The Future of Public Health: Environmental Public Health Tracking, National Exposure Research Laboratory (NERL) Environmental Protection Agency, Raleigh North Carolina. November, 2003

Resnick B, **Nachman KE**, Zablotsky J. *The Profile in Maryland Environmental Health Practice*. Region III Environmental Protection Agency and the Agency for Toxic Substances and Disease Registry. Philadelphia, PA. December 2003.

Burke T, Resnick B, **Nachman KE**, Zablotsky J. *The Profile of Maryland Environmental Health Practice—An Update*. Maryland Association of County Health Officers Monthly Meeting. Baltimore, MD. March 2004.

Nachman KE, Apelberg B. Building on the Work of the Pew Environmental Health Commission: The Utility of National Datasets for Environmental Public Health Tracking. Johns Hopkins Center of Excellence for Environmental Public Health Tracking Luncheon. Baltimore, MD. October 2004.

Nachman KE, A Journey into the World of Poop: Center for a Livable Future Lunch Meeting. Baltimore, MD. February 2005.

Burke T, Resnick B, **Nachman KE**, Zablotsky J. Advancing Maryland Environmental Health Practice. Maryland State-Local Liaison Committee Meeting. Maryland Department of Environment. Baltimore, MD, January 2006.

Resnick B, **Nachman KE**, Zablotsky J. The Northeast Regional Profile of Local Environmental Health Practice. Pennsylvania Environmental Health Directors Meeting. Harrisburg, PA, March 2006.

Nachman KE, Breyse P. Evaluation of Human Health Risk Assessments Performed for the Southwest Area Park Canine Facility. Baltimore County Fraternal Order of Police, Lodge #4. Carnie, MD, May 2006.

Nachman KE. Pelletized Waste Fertilizers: A Case Study in Arsenic Exposure. USEPA, National Center for Environmental Economics. Washington, DC. May 2006.

Nachman KE. Assessment of Human Health Risks Resulting from Exposures to Arsenic During the Use of Pelletized Poultry House Waste and Biosolids Fertilizers. Thesis Seminar. Baltimore, MD, August 2006.

Nachman KE. Risk Assessment: Current Applications and Future Direction. Invited seminar, National Center for Health Statistics, Office of Analysis and Epidemiology Seminar Series, Hyattsville, MD, March 2009.

Nachman KE. From Farm to Tap: Impacts of Intensive Animal Agriculture on Water Quality and Human Health. Capitol Hill Briefing, Washington DC, June 2009.

Nachman KE. Industrial Food Animal Production: Known Threats and Emerging Issues. Invited seminar, USEPA National Center for Environmental Research, Washington DC, June 2009.

Nachman KE. EPA's Integrated Risk Information System. University of Maryland School of Public Health. College Park, MD, October 2009.

Nachman KE. Arsenical drugs in food animal production: Where we're going and how we'll get there. Invited seminar, Columbia Superfund Research Program Seminar Series, Columbia University Mailman School of Public Health, New York, NY, March 2010.

Nachman KE. The human health risks associated with industrial food animal production. Johns Hopkins Bloomberg School of Public Health. Baltimore, MD, September 2010.

Nachman KE. The Smokestack Effect: Data, Media and Action. University of California, San Francisco. Reach the Decision Makers Webinar. San Francisco, CA, October 2010.

Nachman KE. The human health risks associated with industrial food animal production. Mini-Med School: Food Systems, Health and a Livable Future. Odyssey Lecture Series. Baltimore, MD, October 2010.

Nachman KE. Choice of Exposure Assumptions Used in Modeling Inorganic Arsenic Cancer Risk. Johns Hopkins Bloomberg School of Public Health. Baltimore, MD, April 2011.

Nachman KE. The Health and Environmental Impacts of Large-Scale Meat & Poultry Production. Maryland Hospitals for a Healthy Environment Food Conference: Local Sustainable Meat and Poultry: Making the Shift in Institutional Purchasing. Clarksville, MD, May 2011.

Lawrence RS, **Nachman KE.** Industrial Food Animal Production and the High-meat Diet: Health and Environmental Consequences. Invited webinar for the Center for Science in the Public Interest, June 2011.

Nachman KE. Animal Waste, Produce Safety, and the Food Safety Modernization Act. Public Health Practice Grand Rounds, Johns Hopkins Bloomberg School of Public Health. Baltimore, MD, September 2011.

Nachman KE. Industrial Food Animal Production, Human Health and the Environment. Invited seminar: Dietary Managers' Association Annual Meeting. Ocean City, Maryland, October 2011.

Nachman KE and Farming for the Future Program Personnel. 11 Things You Probably Didn't Know About Industrial Food Animal Production. 2011 Food Day Teach-In. Baltimore, MD, October 2011.

Nachman KE. Arsenical drugs in food animal production. Dartmouth Institute for Health Policy and Clinical Practice. Hanover, NH, February 2012.

Nachman KE. Industrial food animal production: consequences for agricultural communities and food safety. Invited seminar: Dartmouth Hitchcock Medical Center Grand Rounds. Hanover, NH, February 2012.

Nachman KE. Arsenical drugs in food animal production. Invited webinar: Healthy Food Action/Institute for Agriculture and Trade Policy, March 2012.

Nachman KE. The use of antibiotics in food animal production and the value and limitations of monitoring for livestock antibiotics. Environmental Integrity Project Field Sampling Training Session, Washington, DC, April 2012.

Nachman KE. Arsenical drugs in food animal production. Network for Public Health Law, Eastern Regional Conference. Baltimore, MD, June 2012.

Nachman KE. Antimicrobial Resistance and Food Animal Production: Developments since Putting Meat on the Table. Meeting of the Former Commissioners of the Pew Commission on Industrial Food Animal Production, Baltimore, MD, October 2012.

Nachman KE. Consumers Union Panel: Arsenic in Foods. New York, NY October 2012.

Nachman KE. Arsenic in food. Meeting of the Health Advisory Board of the Johns Hopkins Bloomberg School of Public Health, Baltimore, MD. October 2012.

Kim BF, **Nachman KE.** Urban Community Gardeners' Knowledge and Attitudes Related to Soil Contamination Risks. Baltimore Community Greening Resource Network Annual Meeting, Baltimore, MD. January 2013.

Kim BF, **Nachman KE.** Urban Community Gardeners' Knowledge and Attitudes Related to Soil Contamination Risks. Baltimore Master Gardeners' Monthly Meeting and Lecture Series, Baltimore, MD. March 2013.

Nachman KE. Arsenic-based drugs in food animal production. Indiana CAFO Watch 2013 Conference, Indianapolis, IN. August 2013.

Nachman KE. From Bench to Legislation: Using Evidence to Inform Decision-making. Johns Hopkins Bloomberg School of Public Health Environmental Health Sciences Faculty Meeting, Baltimore, MD. September 2013.

Kim B, Dix K, Poulsen M, Margulies J, Palmer A, **Nachman K.** Baltimore Urban Community Gardeners' Knowledge and Perceptions of Soil Contaminant Risks. Poster, Baltimore Ecosystem Study Annual Meeting, Baltimore, MD. October 2013.

Nachman KE. Recent research in industrial food animal production and public health. Wisconsin Rural Health Forum, Sturgeon Bay, WI. November 2013.

Nachman KE. Caramel Color and 4-Methylimidazole in Soda: A Cancer Risk Assessment. Presentation to FDA/CFSAN/OFAS, College Park, MD, January 2014.

Nachman KE. A crash course in antibiotics in animal agriculture. New York City Bar Association Symposium ("Animal Agriculture: What Is Its Impact On the Environment?"), New York, NY, March 2014.

Nachman KE. Urban Soil Safety Panel. Parks and People Foundation, Community Greening Resource Network Meeting, Baltimore, MD, September 2014.

Nachman KE. Food Day Special: The 21st Century Jungle (webinar moderator and presenter). Invited webinar: Health Food Action, October 2014.

Nachman KE. The Public Health Crisis of Antibiotic Misuse in Animal Agriculture. Invited seminar, A Woman's Journey Annual Conference, Baltimore, MD, November 2014.

Nachman KE. Arsenic-based Animal Drugs: A Case Study in Scientific Evidence, Media Coverage, and Policy Change. Invited seminar: Dartmouth Toxic Metals Superfund Research Program, Hanover, NH, November, 2014.

Nachman KE. CAFOs, Air Pollution and Public Health. Invited press conference: Environmental Integrity Project and the Humane Society of the United States, Washington, DC, January 2015.

Davis BJK, Li CX, **Nachman KE.** The Health Risks and Benefits of Consuming Raw versus Pasteurized Milk: A Scientific Literature Review. Briefing to the Maryland General Assembly, House Committee on Health and Governmental Affairs, Subcommittee on Public Health. Annapolis, Maryland, February 2015.

Nachman KE. Recent research in industrial food animal production and public health. After the Siting – Health Forum. Bayfield, WI, February 2015.

Nachman KE. A crash course in antibiotics in animal agriculture. New York City Bar Association Symposium (“Superbug Farm: A Discussion on Antibiotics in Agriculture”), New York, NY, June 2015.

Nachman KE. A crash course in antibiotics in animal agriculture. Natural Products Expo East, Baltimore, MD, September 2015.

Nachman KE. Antibiotic use in food animal production and public health risks. Johns Hopkins Bayview Medical Center Grand Rounds, Baltimore, MD, September 2015.

Nachman KE. Translating Science for Policymakers. Unite for Sight Webinar, December 2015.

Santo R, Kim B, Scatterday A, Synk C, Fry J, **Nachman K**, Neff R. Less Meat, Less Heat: Climate Benefits of Dietary Shifts in Selected Countries. COP21 Paris Climate Conference. December 2015.

Nachman KE. Collecting actionable surveillance data – the US perspective. Designing a Monitoring and Accountability Framework for Antibiotic Resistance (Workshop). Duke Sanford School of Public Policy, Durham, NC, December 2015.

Nachman KE. Poultry drugs, arsenic and public policy: a case study in evidence-based advocacy. NIH Science Policy Discussion Group, Bethesda, MD, February 2016.

Nachman KE. Antibiotic use in food animal production and public health risks. Comparative Pathobiology Seminar Series, Johns Hopkins School of Medicine, Baltimore, MD, February 2016.

Nachman KE. The public health crisis of antibiotic misuse in animal agriculture. Executive Support Staff Group, Johns Hopkins Medical Institutions, Baltimore, MD, March 2016.

Nachman KE. Exploring the Societal Burden of Animal Agricultural Antibiotic Use. True Cost of American Food Conference, San Francisco, CA, April 2016.

Nachman KE. Evidence for environmental transmission of antibiotic-resistant bacteria from industrial farms. Food Forum of the Institute of Medicine of the National Academy of Sciences. Washington, DC, April 2016.

Kim BF, **Nachman KE.** Soil Matters: A Symposium on Urban Soils: Contamination and Mitigation. Community Greening Resource Network Event. Baltimore, MD, August 2016.

Nachman KE. Arsenic-based poultry drugs: a case study in industrial agriculture and cancer. National Cancer Institute, 15th Annual Cancer Prevention Fellowship Program Fall Symposium, Bethesda, MD, September 2016.

Nachman KE. Risks and perceptions among urban agriculture participants in Baltimore. University of Maryland, Baltimore County, Baltimore, MD, October 2016

Nachman KE. A crash course in antibiotics in animal agriculture. One Health Day Symposium, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, November 2016.

Nachman KE. Industrial Food Animal Production in Low- and Middle-Income Countries: Current trends and future priorities. Webinar. Johns Hopkins Center for a Livable Future, Baltimore, MD, December 2016.

Nachman KE. Building a baseline for assessing the human health impact of a landmark legislative intervention on antibiotic use in industrial poultry production. Clinical Conundrums seminar series of the Sherrilyn and Ken Fisher Center for Environmental Infectious Diseases, Baltimore, MD, April 2017.

Nachman KE, Fox MA, Burke TA. Tutorial on NAS Report Science and Decisions: Regulatory Risk Assessment. Invited Webinar, PHRE Rapid Response Network, University of California, San Francisco, May 2017.

Nachman KE. Arsenic-based poultry drugs: Turning evidence into policy. Interdisciplinary Toxicology Program Seminar Series, University of Illinois Urbana-Champaign, Champaign, IL, October 2017.

Nachman KE. Safe Urban Harvests: Study Overview and Preliminary Results. United States Department of Agriculture, Agricultural Research Service, Beltsville Human Nutrition Research Center. 2017-2018 BHNRC Seminar Series, Beltsville, Maryland, January 2018.

Nachman KE. Translating Public Health Science in the Modern Era: Essential, Sometimes Uncomfortable, but Usually Rewarding. NIEHS Northeast Regional Superfund Meeting (Invited Keynote), Boston, Massachusetts, April 2019.

Nachman KE. Moving Beyond the Baseline to Assess the impact of California’s SB27. Infectious Disease and Clinical Research Topics seminar series of the Sherrilyn and Ken Fisher Center for Environmental Infectious Diseases, Baltimore, MD, June 2019.

Nachman KE, Lupolt S, Santo R, Kim B, Green C, Codling E, Chen R, Rule A. The Safe Urban Harvests Study: a community-driven assessment of metals exposure in the context of urban agriculture. Seminar for European Food Safety Administration US visit, Baltimore, MD, September 2019.

Lupolt S, Santo R, **Nachman KE**, “Findings from the Safe Urban Harvests Study: A survey of soil, water, and produce from Baltimore farms and gardens” at University of Maryland Extension- Baltimore City Master Gardeners Speaker Series, September 17, 2019, Cylburn Arboretum, Baltimore, MD.

Nachman KE, “The Safe Urban Harvests Study: An Exploration of Urban Agriculture and Metals Exposure in Baltimore”, the Johns Hopkins Center for Human Nutrition Seminar Series, Baltimore, MD., October 2019.

Nachman KE, “Country-specific dietary shifts to mitigate climate and water crises”, Alliance for a Healthy World Symposium, Baltimore, MD, November 2019.

Nachman KE, “The Safe Urban Harvests Study: Metals, Decision-making and Risk Communication”. Columbia Superfund Research Program Seminar Series, New York, November 2019.

Nachman KE, “Changing Diets for a Changing Climate” Rotary Club of Richmond, Richmond, VA. March 2021

MEDIA/PRESS INTERVIEWS

USA Today, September 2009 (Testing for toxics at schools sparks questions, lawsuits)
Food Safety News, September 2009 (Bill Introduced to Ban Arsenic Antibiotics in Feed)
Times Beacon Record, November 2009 (Israel: Pass the turkey, hold the poison)
WTOP DC, November 2009 (Do you know what turkeys are gobbling?)
FDA Week, Jan 2010 (Animal Antibiotic Ban Advocates Fire Back At GOP Lawmaker's Op-Ed)
FDA Week, Feb 2010 (Stakeholders Pull Out The Guns Following CBS Animal Antibiotic Special Report)
FDA Week, Jun 2010 (Lawmakers Press For Bolstered Antibiotics Monitoring Activities)
York Daily Record, September 2010 (Peach Bottom Township in fight over farm with AG Tom Corbett)
National Public Radio, November 2010 (No Arsenic In Pardoned Turkeys, But It Might Be In Yours)
NPR Environment in Focus (radio), February 2011 (Nachman interview)
WAMU radio, February 2011 (Nachman interview)
Bay Daily, February 2011 (MD Attorney General to Poultry Industry: Get the Arsenic Out of Chicken)
Bay Daily, March 2011 (Lobbying By Poultry Industry in Maryland Keeps Arsenic in Chicken Feed. Attorney General Gansler Fights For Ban at Federal Level)
Southern Maryland Today, February 2011 (Hold the Arsenic)
Tennessean, March 2011 (Tennessee organic farmer worries corporate chicken farm will harm area)
Change.org, March 2011 (Drugs in Animal Feed Pose Dire Human Health Risks)
Food Safety News, March 2011 (Paper: Medicated Feed Poses Risks to Humans)
Baltimore Sun, March 2011 (Group says "factory" farms pollute air)
E & E News, March 2011 (AGRICULTURE: EPA data show CAFO air pollution exceeds federal standards – study)
Clean Air Report, Inside EPA, March 2011 (EPA Faces Calls To Bolster AFO Emissions Study With Monitoring, Review)
Grist, April 2011 (Will the US hog industry ever kick its reliance on low dose antibiotics?)
Baltimore Sun, June 2011 (Poultry industry going 'cool turkey' on arsenic)
Consumer Reports, November 2011 (Arsenic in your juice: How much is too much? Federal limits don't exist.)
Food and Environment Reporting Network, January 2012 (Dispute Over Drug in Feed Limiting US Meat Exports)
Food Safety News, January 2012 (Animal Drug Widely Used in US Meat the Focus of Trade Dispute)
Public Health: On the Inside (podcast), January 2012 (The Poison that Lurks in Juice)
New York Times, Nick Kristof, April 2012 (Arsenic in Chicken?)
Rodale Institute News, April 2012 (3 Dirty Chicken Facts Exposed)
CBS Radio, April 2012 (Nachman interview)
WKGO News (radio), San Francisco, April 2012 (Nachman interview)
CNN Situation Room (TV), April 2012 (Nachman interview)

Baltimore Sun, April 2012 (Researchers find banned antibiotics in poultry byproducts)

The Marc Steiner Show (radio/podcast), April 2012 (From Writing the Disaster to Disastrous Effects of Drugs in Animal Feed)

Chemistry World, April 2012 (Voluntary controls on antibiotics on US farms criticized)

The Guardian, April 2012 (Scientists cry fowl over the FDA's regulatory failure)

WHYY Radio, May 2012 (Radio Times with Marty Moss-Coane: What's in our food? – with Michael Pollan)

Maryland Morning with Sheilah Kast (radio), May 2012 (The Food OUR Food Eats)

Washington Post, May 2012 (Maryland set to ban arsenic-containing drug in chicken feed)

San Francisco Chronicle, June 2012 (Trader Joe's prodded to drop meat with antibiotics)

WYPR Radio, July 2012 (Environment In Focus)

Redbook, July 2012 (Get a new grocery list!)

New York Times, September 2012 (Farm Use of Antibiotics Defies Scrutiny)

Consumer Reports, September 2012 (Arsenic in your food)

Today Show (TV), September 2012 (Arsenic in rice story)

MSNBC Rossen Reports, September 2012 (Arsenic levels in rice trouble experts)

The Atlantic, September 2012 (So There's Arsenic in Our Rice—Now What?)

Huffington Post (webcast), Huffpost Live!, October 2012 (The End of Antibiotics?)

Mother Jones (print edition), November 2012 (Fat Pharm)

Rodale (online), November 2012 (9 Disgusting Facts about Thanksgiving)

Food Safety News, December 2012 (FDA Sued for Withholding Data on Food Animal Antibiotics)

Green Street Radio (Al-Jazeera), December 2012 (Nachman interview)

Rodale (online), February 2013 (Use of Antibiotics in Animals Continues to Climb)

Annapolis Capital Gazette, February 2013 (Meat, poultry labeling rule changes proposed)

New York Times, March 2013 (Study Shows Bacteria Moves From Animals to Humans)

New York Times, May 2013 (Study Finds an Increase in Arsenic Levels in Chicken)

CBS Radio, May 2013 (Nachman interview)

Prevention Magazine (online), May 2013 (The Hidden Threat in Your Chicken)

Women's Health (online), May 2013 (Should I Worry About Arsenic in Chicken?)

Johns Hopkins Public Health, May 2013 (Chicken à la Arsenic?)

NPR The Salt (online), May 2013 (How Trace Amounts of Arsenic End Up In Grocery Store Chicken)

Marc Steiner Show Sound Bites (radio), May 2013 (Nachman interview)

Environmental Health Perspectives Science Selections, July 2013 (Arsenical Association: Inorganic Arsenic May Accumulate in the Meat of Treated Chickens)

New York Times, July 2013 (New Limits for Arsenic Proposed by F.D.A.)

USA Today, August 2013 (Chipotle considering allowing antibiotics-treated beef)

New York Times, September 2013 (No Immediate Risk Is Found From Arsenic Levels in Rice)

The Guardian, September 2013 (Mad cow, bird flu, pink slime? The bigger threat is antibiotics in our meat)

Rodale (online), September 2013 (The New MRSA Threat Near Your Home)

Marc Steiner Show Sound Bites (radio), October 2013 (Nachman interview)

Rodale (online) November 2013 (How Filthy Farms Contaminate Your Organic Chicken)

Prevention, November 2013 (The Dirty Secret About Organic Chicken)

Green Bay Press Gazette, November 2013 (Speaker: Farm regulators not protecting public health)

Science, December 2013 (FDA Moves to Reduce Antibiotics in Livestock)

The Hill, December 2013 (FDA to phase out antibiotics use in meat)

ABC News (online), December 2013 (FDA: Stop Feeding Livestock Antibiotics For Growth Promotion...Please?)

New York Times, December 2013 (F.D.A. to Phase Out Use of Some Antibiotics in Animals Raised for Meat)

Popular Science, December 2013 (FDA Aims To Reduce Use Of Antibiotics For Fattening Farm Animals)

Forbes, December 2013 (Report Finds Harmful Bacteria On 97% of Chicken)

Huffington Post, December 2013 (Half Of Supermarket Chicken Harbors Superbugs, Consumer Reports Finds)

USA Today, December 2013 (FDA moves timidly against antibiotic use on farms: Our view)

Consumer Reports, February 2014 (Caramel color and your health: What you need to know about the potential carcinogen that can be found in this common food additive)

The Kojo Nnamdi Show, WAMU (radio interview), February 2014 (Curbing the Overuse of Antibiotics)

Food Safety News, March 2014 (Warren Questions FDA Commissioner About Antibiotics Guidance)

Washington Post, March 2014 (25 drug companies to phase out animal antibiotics)

International Business Times, April 2014 (Antibiotic Resistance: How Livestock Lobbyists and Drug Companies Hinder The US Fight Against Superbugs)

WBAL-NBC (TV), May 2014 (Docs: Antibiotic-filled foods a problem for human illness treatment)

Hub, July 2014 (Court says FDA is not required to hold hearings on antibiotics in animal feed)

Food Safety News, July 2014, (Ruling on FDA's Oversight of Animal Antibiotic Use Called a 'Big Blow to Public Health')

Food Poisoning Bulletin, July 2014 (Court Rules FDA Doesn't Need to Hold Hearings on Antibiotic Use)

Reuters, September 2014 (Farmaceuticals - Documents reveal how poultry firms systematically feed antibiotics to flocks)

CBS Radio, September 2014 (radio interview)

Marc Steiner Show, September 2014 (radio interview)

To the Point, KCRW, September 2014 (radio interview, Antibiotics in America's Favorite Meat)

Politico, October 2014 (FDA report stokes debate over antibiotic use)

New York Times, October 2014 (Antibiotics in Livestock: F.D.A. Finds Use Is Rising)

Food Safety News, October 2014 (FDA: Antibiotics Sales to Farms Up 16 Percent Between 2009-12)

Mother Jones, October 2014 (Are Your Chicken Nuggets Ruining Your Antibiotic Ointment?)

Vice, October 2014 (Is the US Meat Industry Pushing Us Into a 'Post-Antibiotic Era'?)

Men's Health, December 2014 (The Scary Truth About Chicken)

Pittsburgh Post-Gazette, January 2015 (Suits take aim at factory farm air pollution)

Feedstuffs, January 2015 (EPA sued over CAFO regulation petitions)

The Dodo, January 2015 (EPA Sued For Letting Factory Farm Cesspools Go Unchecked)

Bay Journal, January 2015 (EPA sued over inaction on factory farm air pollution)

Civil Eats, January 2015 (Will This Lawsuit Curb Extreme Air Pollution From Factory Farms?)

Agri-View, February 2015 (Wisconsin Environmental Group Sues EPA)

Men's Journal, February 2015 (The Soda-Cancer Connection)

Men's Health, February 2015 (The Sketchy Ingredient Lurking in Your Soda)

Al Jazeera News (TV), February 2015 (TV interview about 4-MEI study)

Fox News, February 2015 (Half of Americans at risk of carcinogen exposure from soda, study finds)

Beverage Daily, February 2015 (Study suggests 4-MEI in soft drinks presents 'avoidable and unnecessary' cancer risk)

New York Times, March 2015 (Obama Seeks to Double Funding to Fight Antibiotic Resistance)

International Business Times, April 2015 (Antibiotic Resistance: How Livestock Lobbyists and Drug Companies Hinder The US Fight Against Superbugs)

Civil Eats, May 2015 (Five Things to Consider About Tyson's Big Antibiotics Announcement)

Reader's Digest, May 2015 (50 Secrets Food Manufacturers Don't Tell You That Could Change the Way You Eat)

The Oregonian, May 2015 (Antibiotic-resistant superbugs drive chicken producers to change)

Baltimore WBFF News (TV), November 2015 (Overuse of antibiotics in livestock poses health risk to kids)

CNN (TV), January 2016 (How antibiotics in our food system affect your health)

Huffington Post, February 2016 (This App Could Help You Avoid Toxic Chemicals In Everyday Products)

New York Times, March 2016 (F.D.A. Proposes a Limit on Arsenic in Rice Cereal for Babies)

Food Sleuth Radio, July 2016 (Nachman interview)

Environmental Health Perspectives Science Selections, July 2016 (Organoarsenic Drugs over Time: The Pharmacokinetics of Roxarsone in Chicken Meat)

Scientific American, December 2016 (New Kind of Antibiotic Resistance Shows Up on a Hog Farm)

Civil Eats, December 2016 ("Nightmare" Bacteria Resistant to Last-Resort Antibiotics Discovered on Farm)

Center for Infectious Disease Research and Policy, January 2017 (Farm antibiotics: Does new FDA policy go far enough?)

Popular Science, February 2017 (Exactly How Bad Is Antibiotic Resistance Right Now?)

The Independent, February 2017 (Expert didn't feed any rice to infant children because of risk from naturally occurring arsenic)

Science News, February 2017 (Three ways scientists are trying to keep arsenic out of our diets)

Next City, January 2018 (Foraging is Flourishing in Baltimore, for Rich and Poor)

Baltimore Sun, February 2018 (Fowl air? Lawmakers propose study to begin tracking air pollution from Maryland chicken farms)

Old Line Plate (online blog), February 2018 (Foraging for Food In Baltimore)

Civil Eats, February 2018 (Foraging is Alive and Well in Baltimore. Can it Help Fight Hunger Too?)

Inside Climate News, April 2018 (Giant Chicken Houses Overrun Delmarva, and Neighbors Fear It's Making Them Sick)

Urban Food Futures, May 2018 (Unnoticed, yet happening: food foraging in the city)

CNN (TV), May 2018 (What's in the Diets of Animals Raised for Food, and Why Might That Matter to Some Consumers?)

ScienceLine, July 2018 (Foragers are eating wild in America's concrete jungles)

Baltimore Sun, January 2019 (Maryland will test to determine if Eastern Shore chicken farms are polluting the air)

Delmarva Now, January 2019 (Maryland air quality monitoring plan reignites poultry battle)

Food and Environment Reporting Network, January 2019 (In Maryland, poultry industry monitoring initiative restarts debate)

Popular Science, February 2019 (Fruit juices have potentially dangerous levels of lead and arsenic)

Chesapeake Bay Journal, February 2019 (Poultry industry critics fight to clear the air on emissions)

Delmarva Now, April 2019 (Chicken industry sees slow growth in 2018 but continued drop in growers)

Civil Eats, May 2019 (The Battle Over Air Quality near Factory Farms on the Eastern Seaboard)

Reuters, September 2019 (Vegetarian diets not always the most climate-friendly, researchers say)

AFP News Wire, September 2019 (Poor Countries Will Need To Increase Carbon Footprint To Address Hunger: Study)

Huffington Post, September 2019 (Why Going Vegetarian Isn't Necessarily The Best Diet For The Planet)

Newsweek, September 2019 (This is the best diet to save the planet)

CBS Radio, September 2019 (Nachman interview)

Marketwatch, September 2019 (Vegetarian diets can't save Earth, but eating less meat might)

Washington Times, September 2019 (Vegetarian diets harsher on environment than eating some meat: Study)

Telegraph, September 2019 (Eating some meat is better for the environment than going vegetarian, new study finds)

Yahoo News, September 2019 (Meat-free diets 'can be worse for the environment')

Daily Mail, September 2019 (Sorry vegetarians!)

Inside Climate News, September 2019 (Can a Climate Conscious Diet Include Meat or Dairy?)

WBEZ Chicago - Chewing Podcast, October 2019 (Nachman interview)

100° (French language), January 2020 (Alimentation et protection de la planète : par où commencer pour réduire le bilan carbone de nos assiettes ?)

WYPR Baltimore radio and web, March 2020 (Eastern Shore Residents Push State Lawmakers For Limits On Chicken Farms)

Fast Company, May 2020 (4 ways to protect food workers and the food supply during the pandemic)

Food and Environment Reporting Network (Ag Insider), July 2020 (Covid-19 cases appear to be slowing at meat plants. But companies aren't releasing test results)

HUB at Johns Hopkins University, July 2020 (Ailing Under Slaughterhouse Rules)

CDIRAP News, May 2021 (Fewer drug-resistant microbes found in organic meat)

NPR, June 2021 (An Olympic Hopeful Blames A Burrito For Her Positive Drug Test)

Civil Eats, November 2021 (Could a Rapid Test For Antibiotics Bring Transparency to the Meat Supply Chain?)

Civil Eats, December 2021 (Biogas from America's favorite meat: pollution solution or a prop for poultry?)

Bloomberg News, March 2022 (Pork With Toxic Risk Is in U.S. Food Supply Amid FDA Stalemate)

HUB at Johns Hopkins University, February 2022 (Researchers to develop new methods for estimating children's exposure to chemicals)

HUB at Johns Hopkins University, October 2022 (Study: EPA approach to assessing chemical health risks falls short)

Inside EPA, November 2022 (Researcher Hopeful EPA Will Adopt Best Practices In TSCA Evaluations)

Civil Eats, November 2022 (The Deep Dish: An Insider Look at Soil Health)

COMMENTS TO OR RESPONSES TO SOLICIATIONS FROM FEDERAL, STATE AND LOCAL AGENCIES

USDA/APHIS – February 15, 2010 (Re: USDA Environmental Impact Assessment of J101 and J103 alfalfa - APHIS-2007-0044)

USDA/GIPSA – June 22, 2010 (Re: Proposed Rule: Implementation of Regulations Required Under Title XI of the Food, Conservation and Energy Act of 2008: Conduct in Violation of the Act, 75 Federal Register 35338)

Letter to directors of CDC (Thomas Frieden) and NIAID (Anthony Fauci) – June 29, 2010 (Re: Testimony before House Energy and Commerce Subcommittee on Health)

FDA/CVM – September 16, 2010 (Re: Written comments and questions for the September 19-20, 2010 Veterinary Medical Advisory Committee on Genetically-Engineered Salmon)

FDA – November 1, 2010 (RE: Comment on Strategic Priorities Document - Docket No. FDA-2010-N-0506)

Yakima Regional Clean Air Agency – December 9, 2010 (Comment on the document entitled, “Air Quality Management Policy and Best Management Practices for Dairy Operations”)

USEPA/OAR - March 7, 2011 (RE: Comment on the Development of Emission-Estimating Methodologies for Animal Feeding Operations - EPA-HQ-OAR-2010-0960)

Farm Credit Administration – May 25, 2011 (RE: FCA 76 Fed. Reg. 30280)

USEPA/OPP – August 17, 2011 (RE: Comment on Engineered Nano-Materials in Pesticides - EPA-HQ-OPP-2010-0197)

USDA – October 18, 2011 (RE: USDA Response to the GAO Report on Antimicrobials Used in Food Animals)

FDA – December 2, 2011 (RE: Public Comment on FDA Transparency Initiative - FDA-2009-N-0247)

FDA/CVM – December 7, 2011 (RE: Public Comment on the Animal Drug User Fee Act - Docket No. FDA-2011-N-0656)

CDC/ITFAR – December 9, 2011 (RE: Public Comment on ITFAR's Action Plan to Combat Antimicrobial Resistance)

USEPA/OW – January 19, 2012 (RE: Comment on Concentrated Animal Feeding Operation Reporting Rule - EPA-HQ-OW-2011-0188)

Letter to USDA Undersecretary of Agriculture for Research, Education and Economics – February 6, 2012 (RE: Antimicrobial resistance research)

FDA/CVM – March 6, 2012 (RE: Public Comment on Cephalosporin Extralabel Use Ban - Docket No. FDA-2008-N-0326)

USDA/FSIS – May 29, 2012 (RE: Public Comment on the Modernization of Poultry Slaughter Inspection - Docket No. FSIS-2011-0012)

USEPA/OAR – June 11, 2012 (RE: Comment on Emissions Estimating Methodologies (Docket No. EPA-HQ-OAR-2010-0960))

FDA/CVM – July 12, 2012 (RE: Comment on Draft Guidance for Industry #213 (Docket No. FDA-2011-D-0889-0001))

FDA/CVM – July 12, 2012 (RE: Veterinary Feed Directive; Draft Text for Proposed Regulation (Docket No. FDA-2010-N-0155))

FDA – August 22, 2012 (RE: The Produce Safety Rulemaking for the Food Safety Modernization Act)

CDC/ITFAR – November 5, 2012 (RE: Comment to the Interagency Task Force on Antimicrobial Resistance (CDC-2012-0011))

FDA/CVM – November 7, 2012 (RE: Antimicrobial Animal Drug Sales and Distribution Reporting (FDA-2012-N-0447))

FDA/CVM – January 4, 2013 (RE: Animal Drug User Fee Act (ADUFA) Reauthorization (Docket No. FDA-2013-N-0656))

USDA/NOSB – March 19, 2013 (RE: Comment on Extension of Expiration Date for Oxytetracycline (AMS-NOP-12-0070))

FDA – November 15, 2013 (RE: Comments on the Proposed Rule for Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption and the Proposed Rule for Current Good Manufacturing Practice and Hazard Analysis and Risk-Based Preventive Controls for Human Food (Docket Nos. FDA-2011-N-0920 (RIN 0910-AG36) and FDA-2011-N-0921 (RIN 0910-AG35)))

FORMAL CORRESPONDENCE WITH FEDERAL LEGISLATORS

House Subcommittee on Energy and Power – October 24, 2011 (RE: The Public Health Impacts of the Farm Dust Regulation Prevention Act of 2011 (H.R. 1633))

Rep. Henry Waxman – August 9, 2012 (RE: Public Health Consequences of the Superfund Common Sense Act (H.R. 2997))

PERSONAL STATEMENT OF RESEARCH AND RESEARCH OBJECTIVES

I am interested in the interface between science and policy, and the application of a multidisciplinary lens to solve environmental public health problems from the local to the global scale. My research focus is largely the development and application of methods in the risk sciences, often in the context of the food system. In addition to my efforts in developing knowledge and evidence, I am committed to ensuring that the findings of my research are presented to legislative and regulatory policymakers, public health practitioners and the public in a form that is accessible and actionable.

My involvement in the field of public health and the risk sciences spans more than twenty years and includes experiences working in two federal agencies on issues related to toxicology and chemical risk assessment. My research of food system issues (including antibiotic misuse and arsenic-based drugs) uses a multidisciplinary approach to identify and characterize public health risks that can be addressed through modifications to production practices, human behaviors, or other attainable policy levers.

I have published in high-profile publications documenting public health risks stemming from veterinary drug use in industrial food animal production. My work has been highlighted by national television, radio, print and internet media outlets, including ABC, CNN, CBS Radio, Comedy Central, NPR, the New York Times, the Washington Post, USA Today, the Guardian, the Baltimore Sun, and the San Francisco Chronicle. My research has twice been covered/parodied on the Colbert Report with Stephen Colbert, illustrating its spread into the public consciousness.

I endeavor to ensure that my scholarly work has a life beyond the peer-reviewed literature; my work on arsenical drugs has been translated into a law in Maryland and has been proposed as legislation in numerous sessions of the U.S. Congress. I serve on advisory panels for numerous state agencies and frequently advise federal and state legislators on issues related to food production, public health, and food safety. I also routinely interface with non-governmental organizations (e.g. Environmental Defense Fund, Consumers Union, the Pew Charitable Trusts, Food and Water Watch, and the Union of Concerned Scientists) interested in using scientific evidence to advocate for policies aimed at minimizing unnecessary chemical exposures.

Outside of my research and advocacy work, I am committed to relaying acquired skills and lessons learned to the next generation of public health researchers and practitioners. To this end, I have a robust mentoring and education portfolio; I co-direct the Environmental Sustainability, Resilience and Health doctoral training program, co-direct the Food Systems MPH concentration, co-direct certificate programs in the Risk Sciences and in Food Systems, lead or co-instruct five courses in the risk sciences and food systems, teach an online massive open online course (with an enrollment of 18,000 students in its first run) and advise numerous PhD, DrPH, masters students and postdoctoral fellows. I have also overseen an effort to develop a free, online food system curriculum for undergraduate and high school students.

My research interests include: the public health and global environmental consequences (i.e. climate change, water use, etc.) of food production systems; chemical and microbial food safety; risk assessment and communication; children's environmental health; exposure factor development (occupational, early life stage) regulatory approaches to synthesis of scientific evidence in decision-making; and transparency in federal rulemaking.

Exhibit 15 – Law Offices of Charles M. Tebbutt – Costs

| | Date | LOCMT costs | Account | Amount |
|---------------------------|------------|--|----------|----------|
| Court/Service Fees | | | | |
| | 01/13/2023 | JF pro hac | Fees | 200.00 |
| | 03/24/2023 | service, Farallon subpoena | Fees | 85.00 |
| Total Court/Service Fees | | | | 285.00 |
| Meals | | | | |
| | 10/21/2019 | partial meals, cancelled oral arg trip | Meals | 93.17 |
| | 11/01/2019 | meals, settlement conf | Meals | 111.37 |
| | 12/05/2019 | meals, CT card, site visit | Meals | 199.79 |
| | 12/05/2019 | meals, PJ card, site visit | Meals | 24.88 |
| | 05/21/2020 | meals, CT card, site visit | Meals | 55.19 |
| | 05/21/2020 | meals, PJ card, site visit | Meals | 94.70 |
| | 06/26/2020 | meals, mediation, PJ card | Meals | 66.72 |
| | 06/26/2020 | meals, mediation, CT card | Meals | 49.43 |
| | 09/29/2020 | meals, CT card, settlement mtg | Meals | 97.45 |
| | 09/29/2020 | meals, PJ card, settlement mtg | Meals | 24.64 |
| | 05/13/2021 | meals, site inspection | Meals | 49.68 |
| | 05/04/2022 | meals, site visit | Meals | 82.39 |
| | 09/27/2022 | meals, site visit | Meals | 177.64 |
| | 04/28/2023 | meals, mtg w/CARE | Meals | 217.09 |
| Total Meals | | | | 1,344.14 |
| Postage | | | | |
| | 02/11/2019 | mail ntc ltrs to all parties/ccs | Postage | 140.85 |
| | 03/17/2019 | mail Supp NOIs | Postage | 61.50 |
| | 08/19/2019 | mail Reddout Decl | Postage | 51.00 |
| | 01/24/2020 | mail R26 docs | Postage | 7.35 |
| | 04/03/2020 | mail 2nd supp NOI | Postage | 92.40 |
| | 04/03/2020 | mail in camera ltr | Postage | 7.75 |
| | 09/15/2020 | mail settlement docs | Postage | 73.97 |
| | 11/05/2020 | mail depo docs | Postage | 31.15 |
| | 12/23/2020 | mail 3rd supp noi | Postage | 144.40 |
| | 01/21/2021 | service of process | Postage | 125.00 |
| | 10/13/2021 | response | Postage | 8.70 |
| Total Postage | | | | 744.07 |
| Printing | | | | |
| | 02/28/2019 | copies 101 b&w@.25 | Printing | 25.25 |
| | 03/31/2019 | copies 65 b&w@.25; 9 color@.50 | Printing | 20.75 |
| | 05/31/2019 | copies 106 b&w@.25; 8 color@.50 | Printing | 30.50 |
| | 06/30/2019 | copies 5 b&w@.25 | Printing | 1.25 |
| | 12/31/2019 | copies 7 b&w@.25; 3 color@.50 | Printing | 3.25 |
| | 01/31/2020 | Q1 copies 59 b&w@.25; 8 color@.50; 2 scans@.10 | Printing | 18.95 |
| | 03/31/2020 | Q2 copies 518 b&w@.25; 5 color@.50; 30 scans@.10 | Printing | 135.00 |
| | 08/23/2020 | Heaing transcript | Printing | 10.80 |
| | 09/30/2020 | Q3 copies 123 b&w@.25; 226 color@.50; 24 scans@.10 | Printing | 146.15 |

| Date | LOCMT costs | Account | Amount |
|----------------|--|----------|----------|
| 12/30/2020 | Glessner transcript | Printing | 1,766.75 |
| 12/31/2020 | Q4 copies 2592 b&w@.25; 121 color@.50; 3 scans@.10 | Printing | 708.80 |
| 02/27/2021 | Cummings transcripts | Printing | 1,553.70 |
| 03/31/2021 | Q1 copies 28 b&w@.25; 4 scans@.10 | Printing | 7.40 |
| 12/31/2021 | Q4 copies 114 b&w@.25 | Printing | 28.50 |
| 03/31/2023 | Q1 copies 272 b&w@.25 | Printing | 68.00 |
| 02/14/2022 | DeCoster transcript | Printing | 354.25 |
| 03/09/2022 | DeCoster transcript | Printing | 1,019.35 |
| 02/13/2023 | Chavarin transcripts | Printing | 1,507.70 |
| 02/21/2023 | Stephen transcript | Printing | 937.50 |
| Total Printing | | | 8,343.85 |

Research Services

| | | | |
|------------|------------------------|----------|--------|
| 05/31/2019 | lexis nexis | Research | 141.12 |
| 06/30/2019 | lexis nexis | Research | 452.11 |
| 08/31/2019 | lexis nexis | Research | 426.63 |
| 09/30/2019 | lexis nexis | Research | 145.91 |
| 10/31/2019 | PACER | Research | 42.50 |
| 10/31/2019 | lexis nexis | Research | 388.94 |
| 12/31/2019 | PACER | Research | 13.10 |
| 12/31/2019 | lexis nexis | Research | 61.34 |
| 02/29/2020 | lexis nexis | Research | 247.03 |
| 03/31/2020 | lexis nexis | Research | 169.45 |
| 03/31/2020 | PACER | Research | 6.50 |
| 04/30/2020 | lexis nexis | Research | 37.02 |
| 05/31/2020 | lexis nexis | Research | 11.21 |
| 09/22/2020 | business records rsrch | Research | 7.00 |
| 10/31/2020 | lexis nexis | Research | 27.83 |
| 11/06/2020 | business records rsrch | Research | 38.00 |
| 11/30/2020 | lexis nexis | Research | 140.30 |
| 12/08/2020 | business records rsrch | Research | 56.00 |
| 12/31/2020 | lexis nexis | Research | 396.96 |
| 12/31/2020 | PACER | Research | 63.10 |
| 01/14/2021 | business records rsrch | Research | 74.00 |
| 01/31/2021 | lexis nexis | Research | 61.93 |
| 02/28/2021 | lexis nexis | Research | 241.87 |
| 03/31/2021 | lexis nexis | Research | 59.74 |
| 09/30/2021 | lexis nexis | Research | 9.90 |
| 10/31/2021 | lexis nexis | Research | 64.44 |
| 01/31/2022 | lexis nexis | Research | 73.51 |
| 01/31/2023 | PACER | Research | 37.10 |
| 01/31/2023 | lexis nexis | Research | 100.37 |
| 02/28/2023 | lexis nexis | Research | 489.30 |
| 03/31/2023 | PACER | Research | 37.10 |
| 03/31/2023 | lexis nexis | Research | 414.00 |

| | Date | LOCMT costs | Account | Amount |
|-------------------------|------------|---|----------|----------|
| | 06/30/2023 | PACER | Research | 72.80 |
| | 08/31/2023 | lexis nexis | Research | 331.68 |
| | 09/12/2023 | lexis nexis | Research | 127.61 |
| Total Research Services | | | | 5,067.40 |
| Supplies | | | | |
| | 02/08/2019 | envelopes for ntc ltrs | Supplies | 7.16 |
| | 01/07/2020 | software to convert emails for discovery | Supplies | 4.99 |
| | 01/24/2020 | R26 thumbdrive | Supplies | 9.99 |
| | 12/23/2020 | materials for 3rd supp noi | Supplies | 16.19 |
| Total Supplies | | | | 38.33 |
| Travel Expense | | | | |
| | 02/07/2019 | rental car, site visit | Travel | 40.04 |
| | 10/22/2019 | partial airport pkgng, cancelled oral arg trip | Travel | 20.00 |
| | 10/22/2019 | partial mileage, cancelled oral arg trip 10 mi@.58 | Travel | 5.80 |
| | 10/22/2019 | partial airfare, cancelled oral arg trip | Travel | 173.20 |
| | 10/28/2019 | airfare, settlement conf | Travel | 296.60 |
| | 11/01/2019 | parking, settlement conf | Travel | 8.15 |
| | 11/03/2019 | airport parking, settlement conf | Travel | 32.50 |
| | 11/03/2019 | mileage, settlement conf 20 mi@.58 | Travel | 11.60 |
| | 11/03/2019 | taxi, settlement conf | Travel | 48.94 |
| | 11/04/2019 | airfare, CT, site visit | Travel | 335.00 |
| | 11/21/2019 | airfare, PJ, site visit | Travel | 558.00 |
| | 12/05/2019 | airport transport, CT, site visit | Travel | 125.37 |
| | 12/05/2019 | airport parking, CT, site visit | Travel | 30.00 |
| | 12/05/2019 | mileage, site visit 20 mi@.58 | Travel | 11.60 |
| | 12/05/2019 | hotel, CT & PJ, site visit | Travel | 215.38 |
| | 12/05/2019 | gas, site visit | Travel | 11.90 |
| | 12/05/2019 | rental car, site visit | Travel | 96.72 |
| | 05/21/2020 | lodging, site visit, 6 attys/experts, 5/18-5/21 | Travel | 3,970.60 |
| | 05/21/2020 | mileage, CT, site visit 550 @ .575 | Travel | 316.25 |
| | 05/21/2020 | mileage, PJ, site visit 626 @ .575 | Travel | 359.95 |
| | 06/26/2020 | lodging, mediation, CT & PJ | Travel | 1,045.20 |
| | 06/26/2020 | mileage, CT, mediation 632 @ .575 | Travel | 363.40 |
| | 06/26/2020 | mileage, PJ, mediation 720 @ .575 rt from eugene & 3 trij | Travel | 414.00 |
| | 09/29/2020 | hotel, CT card, settlement mtg | Travel | 83.57 |
| | 09/29/2020 | hotel, PJ card, settlement mtg | Travel | 83.57 |
| | 09/29/2020 | mileage, CT, settlement mtg 412.5 @ .575 | Travel | 237.19 |
| | 09/29/2020 | mileage, PJ, settlement mtg 457.5 @ .575 | Travel | 263.06 |
| | 05/13/2021 | hotel, site visit (1/3 of total) | Travel | 86.69 |
| | 05/13/2021 | mileage, CT, site visit 195 @ .65 (1/3 of total) | Travel | 126.75 |
| | 05/04/2022 | airfare, site visit | Travel | 131.45 |
| | 05/04/2022 | hotel, site visit | Travel | 260.34 |
| | 05/04/2022 | rental car, site visit | Travel | 122.86 |
| | 05/04/2022 | airport transport, site visit | Travel | 15.42 |

| Date | | LOCMT costs | Account | Amount |
|----------------------|-----------------------------------|-------------|---------|------------------|
| 09/27/2022 | hotel, site visit | | Travel | 264.06 |
| 09/28/2022 | hotel, site visit 55% | | Travel | 74.18 |
| 09/28/2022 | mileage, site visit 55% 220@ .625 | | Travel | 137.50 |
| 04/28/2023 | mileage, mtg w/CARE 450@ .655 | | Travel | 294.75 |
| Total Travel Expense | | | | 10,671.59 |
| | | | | 26,494.38 |